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The **ECONOMIC BULLETIN FOR EUROPE** is published three times a year, in May, August and November, and is intended to provide a regular review of the economic situation of Europe in the intervals between the publication of the annual *Economic Survey of Europe*.

The *Bulletin* is published entirely on the responsibility of the Secretariat of the Economic Commission for Europe, and its contents, which are intended for the use both of Governments and of the general public, have not been submitted to the Member Governments of the Commission before publication.

Previous issues of the *Bulletin* have contained a section entitled "Supplementary Statistics", in which were reproduced the latest available figures on a wide variety of subjects, including the industrial production, employment and foreign trade of western European countries. In view of the fact that most of these series are now available in other publications—especially the *Monthly Bulletin of Statistics*, published by the United Nations, New York, and the *Statistical Bulletins* of the Organization for European Economic Co-operation, Paris—it has been decided to cease the regular publication of these series in the *Economic Bulletin for Europe*. From time to time the *Bulletin* will continue to publish appendix tables on subjects of current interest, on which statistical data are not readily available from other sources.

SYMBOLS EMPLOYED

The following symbols have been used throughout this BULLETIN :

- .. = not available or not pertinent.
- = nil or negligible.
- * = estimate by the Secretariat of the Economic Commission for Europe.
- = revised figure.

In referring to combinations of years, the use of an oblique stroke—e.g., 1953/54—signifies a 12-month period (say from 1 July 1953 to 30 June 1954). The use of a hyphen—e.g., 1950-54—signifies an average of the full period of calendar years covered (including the end years indicated).

Unless otherwise indicated, the standard unit of weight used throughout is the metric ton. The definition of "billion" used throughout is one thousand millions. Minor discrepancies in totals and percentages are due to rounding.

Price of Vol. 7, No. 3, of the **Economic Bulletin for Europe** : \$0.50, 3/9 stg. or 2.00 Swiss francs
Annual subscription, including the annual **Economic Survey** \$(U.S.) 3.00 ; 22/6 stg. ; 12 Swiss francs.

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ECONOMIC BULLETIN FOR EUROPE

Prepared by the

Research and Planning Division

ECONOMIC COMMISSION FOR EUROPE

Vol. 7, No. 3 November 1955



UNITED NATIONS

CURRENT ECONOMIC DEVELOPMENTS IN EUROPE

1. THE EFFECTS OF THE INDUSTRIAL UPSWING ON FOREIGN TRADE AND PAYMENTS IN WESTERN EUROPE

In the course of the summer and early autumn of 1955 the western European boom showed serious disparities. Not only did the sales crisis in the textile industries deepen in nearly all countries at the same time as the signs of excess demand in the investment sector became more pronounced, but a still more disturbing development took place in the field of foreign trade and payments. A sharp contrast emerged between the Continent, which continued to accumulate larger and larger currency reserves, and the United Kingdom, where the payments situation deteriorated rapidly, resulting in a further delay in the plans to make sterling convertible into dollars.

As is shown in Chart 1, in the third quarter the foreign reserves of the United Kingdom resumed their earlier decline and fell during the quarter by as much as \$373 million.¹ By contrast, currency reserves increased in nearly all countries on the Continent, including those countries which earlier in the year had been running down their foreign reserves.² In Sweden and Norway the decline in foreign reserves was reversed already in the spring, and the Danish reserve position improved slowly from early July. Italian foreign reserves, which had been moving downward

from the autumn of 1954 to the spring of 1955, rose to a record level of nearly \$1 billion in the autumn.

Besides the fall in British reserves the most striking development shown in the chart is the steady and rapid increase in France's external assets, which have more than doubled during the last twelve months to nearly \$2,000 million at the end of September and now approach in value those of the sterling area.³ The huge foreign currency reserves of western Germany, too, continued to increase and at the end of the third quarter exceeded those of the sterling area by more than one-third. The reserve position at any particular date is, of course, an insufficient guide to the strength of a country's economic position. The conspicuous improvement in the currency position of France reflects largely, as do the improvements in those of Italy and Belgium to some extent, considerable receipts of dollars from the United States for off-shore purchases⁴ and on other special accounts. In the case of western Germany, on the other hand, it is apparent that the full effect of the reduction in the

¹ The figure refers, of course, to the reserves held by the United Kingdom for the entire sterling area. The decline consisted of a fall of \$335 million in the gold and dollar reserves, and an increase of \$38 million in liabilities to the EPU. Full data of the changes in sterling holdings of other sterling area countries are not yet available.

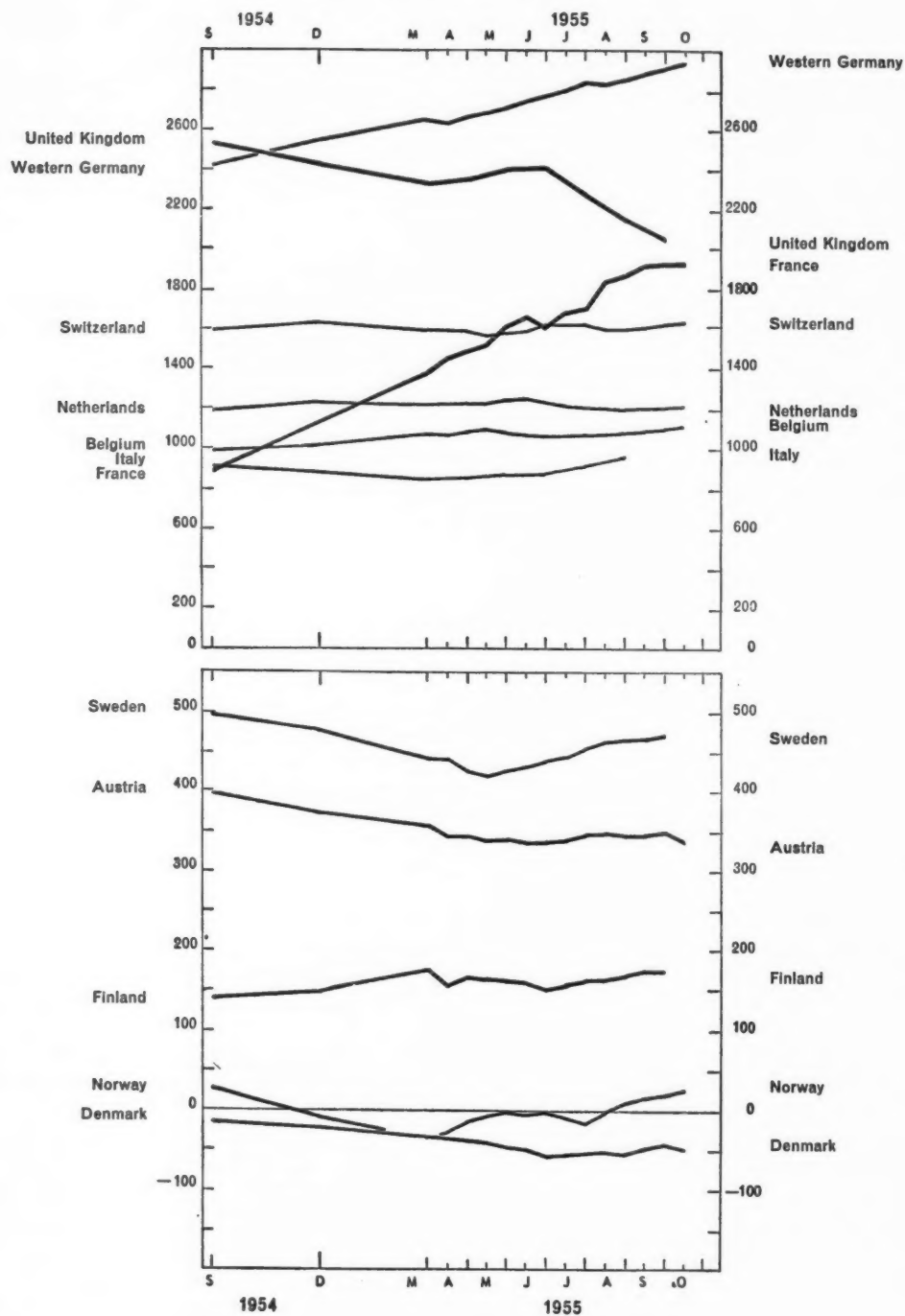
² These increases did not, however, in all cases indicate current account surpluses, but were influenced by certain capital transactions or other extraordinary receipts.

³ The exact size of French foreign exchange reserves is not known. The estimates shown in Chart 1 have been obtained by adding together the gold and foreign exchange holdings of the Bank of France and its advances to the Exchange Stabilization Fund; the latter figure, however, is not an accurate indicator of the actual exchange holdings of the Fund. Furthermore, the debt to the EPU (\$306 million at the end of September 1955) has been deducted from the United Kingdom's gold and dollar holdings, whereas for technical reasons no similar adjustment can be made for France's debt to EPU which, at the end of October 1955, amounted to \$143 million.

⁴ On the importance of off-shore purchases, see *Economic Bulletin for Europe*, Vol. 7, No. 2, pp. 7 to 9.

CHART 1

Foreign Exchange Reserves of Selected Western European Countries

Millions of dollars: end of period

NOTE. — Data refer, in general, to the net of each Central Bank's short-term foreign exchange assets and liabilities. Corresponding data for commercial banks are not included. Figures for the United Kingdom cover gold and dollar reserves less debt to the E.P.U.; data for France are estimates, since actual reserves are unknown.

export surplus has not yet been felt in the reserves: while the export surplus¹ fell from \$191 million in the third quarter of 1954 to a quarterly rate of \$6 million in July/August 1955, the balance of payments surplus as indicated by the accumulation of reserves has declined from \$167 million to \$132 million only.² Finally, in the case of the United Kingdom the reduction of the reserves in the third quarter in part reflected speculative movements and exceeded the amount which could be accounted for by the deterioration in the trade position of the United Kingdom and the other countries of the sterling area.

In spite of the special factors which influenced the payments situation of various European countries, the shifts in the payments position can be interpreted as a reflection of the way in which the international boom has spread from one country to another. The continental countries nearly all entered the present industrial upswing with much larger non-utilized resources of manpower and capacity than did the United Kingdom, and so could draw more advantage from the boom on the export side and were less dependent on imports to overcome domestic bottlenecks. The United Kingdom, in addition to the handicap of its already full utilization of resources, has had the disadvantage that its reserves are pooled with those of a number of overseas countries, which as exporters of agricultural products have had little chance of benefiting from the upswing in world trade.

Chart 2, which shows the trends of foreign trade and industrial production in the United Kingdom, western Germany, France and the United States, illustrates the variety of ways in which the boom has affected the foreign trade of these major countries. The curves shown are based on indices of industrial production and of export and import volume which have been roughly adjusted for seasonal variations; the chart, therefore, represents the developments in broad terms only. In the United Kingdom, the rise in industrial production has been much smaller proportionately, and less sustained, than in the other countries shown in the chart and, in fact, there was a levelling off during the summer months. The two major dock strikes in October 1954 and June 1955 make a comparison of production and foreign trade difficult. It seems, however, that both exports and imports have roughly followed the trend in production, although imports in 1954 expanded somewhat less and in 1955 somewhat more than exports. In view of the high level of internal demand in the United

Kingdom, it is rather surprising that imports and exports have not moved farther apart. A possible explanation may be that stocks of food and textile raw materials have been run down in the United Kingdom, while stocks seem to have risen in the continental countries, as is shown in a later section of this article.

It appears from the chart that western German imports have been most conspicuously outstripping the rise in industrial production. Western Germany has, to a much larger extent than the other countries included in the chart, been trying to remedy internal bottlenecks and combat price rises by increasing imports; these have been brought about by extensive relaxation of quantitative controls (particularly of imports from the dollar area) and by tariff reductions. The rise in western German imports has not been concentrated on raw materials; the fact that imports of finished manufactures have increased proportionately much more than imports of raw materials (although much less in absolute terms) indicates the strength of internal demand. Exports, on the other hand, have been rising more or less parallel with industrial production though recently lagging slightly behind.

A quite different situation is found in the other two countries shown in Chart 2; in France as well as in the United States exports have been rising much more rapidly than industrial production, while imports have kept pace with production in France³ and lagged considerably behind it in the United States. In both of these countries the less-than-full utilization of certain resources in the earlier stages of the present boom has made it possible for them to act as suppliers of bottleneck materials to countries in a tighter supply position; furthermore, in neither case have imports had during this period the special stimulus of a further reduction of trade barriers as in the United Kingdom, western Germany and the smaller western European trading nations.⁴ Dollar liberalization and other forms of relaxation of import controls in western Europe have, in fact, made an important contribution to the large expansion of United States exports to this area. Over three-quarters of the increase in non-military exports between the first halves of 1954 and 1955 went to western Europe, whose purchases from the

³ It should be noted that the rapid rise of French industrial production during the spring and summer of 1955 is overstated, since it is due to the use of steel purchases as a basis for the production index for certain engineering industries.

⁴ Although some liberalization has been achieved in France its effects have been attenuated by the introduction of compensatory import taxes. Recently France has decided to postpone its further liberalization measures (from 77½ to 90 per cent), previously announced for 1 October 1955.

¹ Calculated by deducting c.i.f. imports from f.o.b. exports.

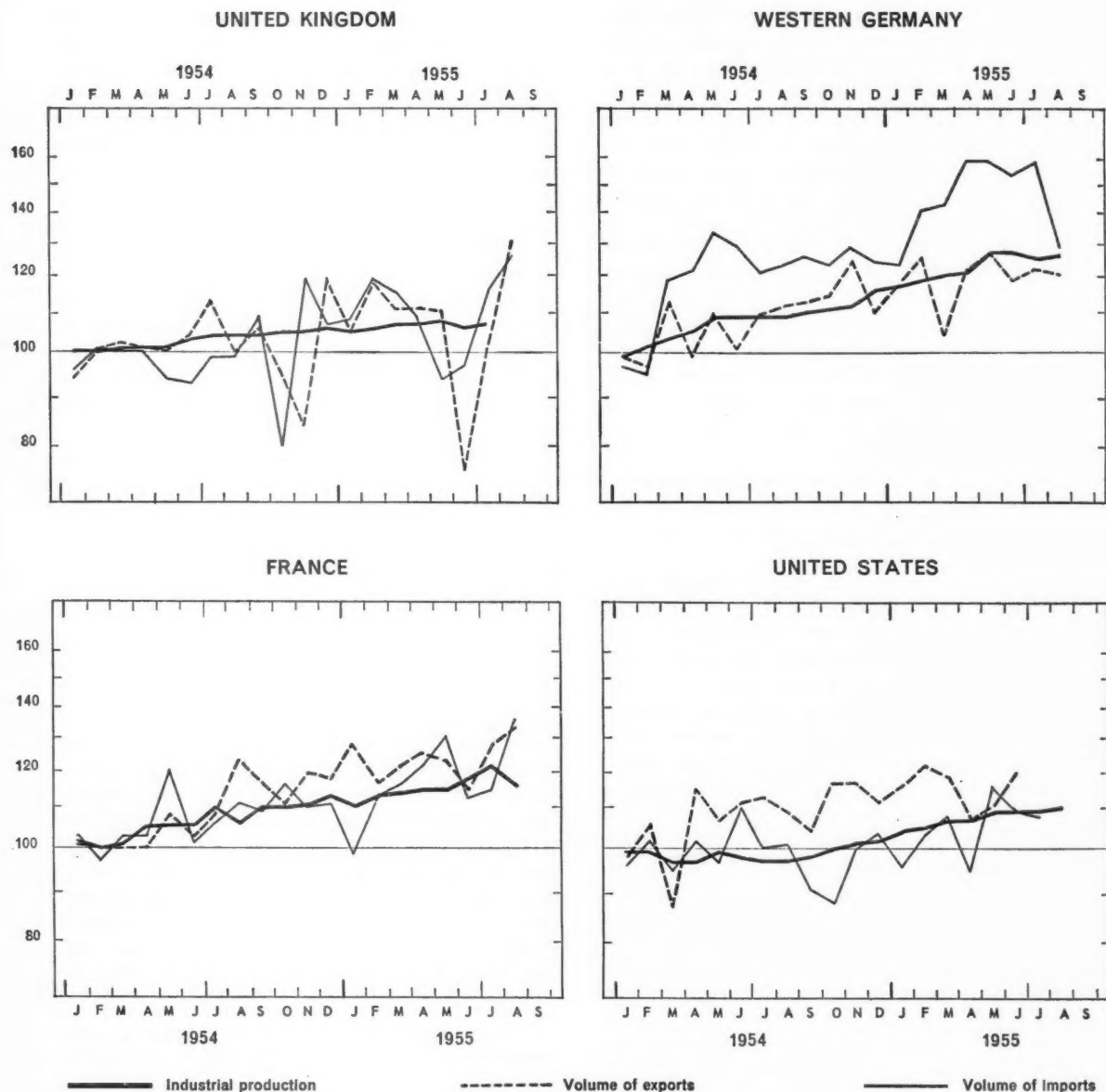
² Part of the discrepancy may be due to the exchange position of the foreign trade banks, not included in official reserve figures.

CHART 2

Industrial Production and the Volume of Imports and Exports in Major Western European Countries and the United States^a

*Index numbers : October 1953–March 1954 = 100
Adjusted for seasonal variations*

Semi-logarithmic scale



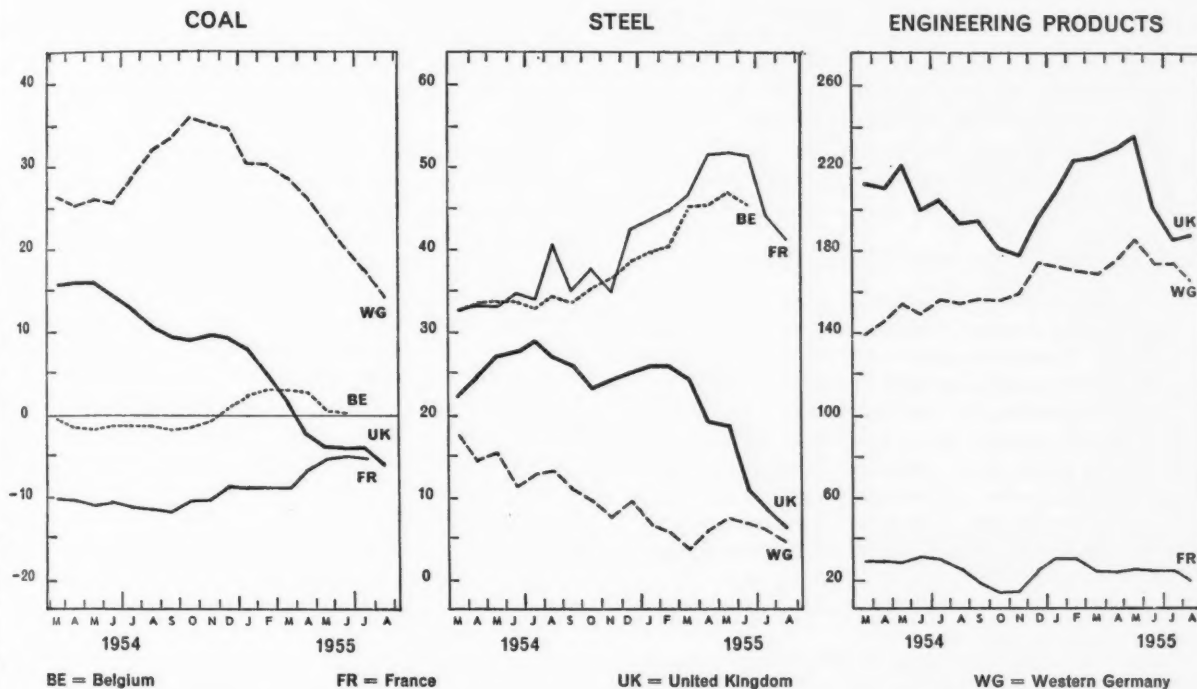
NOTE. — Industrial production includes mining, manufacturing and public utilities with the exception of the series for the United Kingdom, which also covers building.

^a For the United States, exports exclude special categories and are based upon current values.

CHART 3

Net Exports^a of Coal, Steel and Engineering Products

Three-month moving average ending at month indicated—Millions of dollars



NOTE.— The commodities refer to the following SITC definitions: "coal, coke and briquettes" (Group 311), "Iron and steel" (Group 681), and "Machinery transport equipment" (Section 7).

^a Net export values represent the export values at f.o.b. prices less imports valued at c.i.f. prices.

United States rose by 30 per cent between these periods, while United States non-military exports to other countries rose by only 4 per cent.¹

The rise in French exports during the present boom stands in sharp contrast with that of other industrialized western European countries, since it consists almost entirely of food and basic raw materials, particularly steel and coal, while industrial manufactures account for only one-eighth of the increase. This contrast in export developments between, on the one hand, the United Kingdom and western Germany and, on the other, France and Belgium (which has played a rôle similar to that of France as a supplier of basic materials), is brought out in Chart 3, which compares net exports of coal, iron and steel and

engineering products. The shift which has taken place in western Europe's supply pattern emerges sharply. In iron and steel, the United Kingdom and western Germany have in the course of the last twelve months nearly ceased to be significant net exporters, whereas France and Belgium sharply increased their net exports during the first half of 1955. A similar picture characterizes trade in coal—in this case the United Kingdom has during recent months even been a considerable net importer² and western Germany's net exports have fallen almost as sharply. Increased exports from France and Belgium have provided some compensation, but without the expansion of United States coal exports to Europe (shown in Chart 6) a serious fuel crisis would have been unavoidable.

¹ At the same time, military deliveries have fallen even more than non-military exports have expanded, but this circumstance has little relevance to the problems posed by the present industrial expansion in western Europe.

² Data are here charted in terms of values. On the basis of quantities, the net imports of the United Kingdom would be much smaller because the effect of the higher prices of coal imported from America would be eliminated.

The other aspect of the situation comes out in the right hand part of the chart; the reduction of British and German exports and these countries' increased reliance on imports of basic materials have been accompanied by an increase in their net exports of engineering products in spite of the pressure of demand for these products on the home market. French exports of engineering products, on the other hand, continue at a very low level and are smaller in value than French exports of steel, while the United Kingdom and western Germany earn twenty times as much from net exports of engineering products as from net exports of steel.

The Competitive Position of United Kingdom Exports

The deterioration in the British balance-of-payments position has focussed attention—inside as well as outside the United Kingdom—on the problem of the present competitive strength of British exports. It is difficult to arrive at a clear answer to this problem by the use of statistics, partly because of the disturbing influence of the dock strikes on recent trade figures and partly because import restrictions in important sterling area markets as well as in Latin America prevent any conclusions being drawn from the movements of total exports.

Table 1, which shows, side by side, recent changes in the British and western German shares of the import market in eight important western European countries, throws some light on the problem. The comparison is limited to the first five months of 1954 and 1955 even though later data are available for some countries; thus the effect of British strikes at the end of May and in June is practically eliminated.¹ Markets in western Europe are probably better indicators of changes in competitive position than those in most other areas because the liberalization carried out by the O.E.E.C. benefits all European competitors equally while in most overseas countries preferential arrangements and import restrictions blur the picture.

The figures given in the table show that in all of the important commodity groups specified, except chemicals, the share of the United Kingdom has been reduced in nearly all of the markets listed and in most, but far from all, cases, to the benefit of western Germany. Western Germany's gains compared with those of the United Kingdom have been most impressive in exports of machinery and particularly electric machinery. In all of the countries shown, with the exception of Norway, the German share in purchases

of electric machinery increased while that of the United Kingdom declined or, as in Sweden, remained constant. In all of these countries, furthermore, German machinery has reached a high degree of market penetration, and its share of total imports is two to seven times greater than that of British products. Although German advances are less marked in the case of non-electric machinery, the relative position of the United Kingdom has deteriorated in nearly all countries.

Automobiles have often been cited as the most conspicuous example of western Germany's competitive superiority over British products in European markets. The comparison given in Table 1 indicates that this has definitely been true in the Netherlands, Denmark² and Sweden, although in the latter country much of the large increase in imports of German cars was due to the fact that automobile imports from western Germany were liberalized in the summer of 1954.³ On one of the freest non-producer markets in western Europe—Switzerland—the long trend of German advance appears, however, to have been arrested, at least momentarily, and the United Kingdom has even made a small relative gain between the two periods compared.

Western Germany has enlarged considerably, at the expense of the United Kingdom, its share of the market for heavy transport equipment, in which ships and railway rolling stock are the most important components. Deliveries of this type of equipment are more erratic and comparisons between two limited periods cannot be held to be conclusive. Data for ships under construction, however, indicate that western German shipyards have been obtaining an increasing share of the shipbuilding contracts of European countries:⁴

Percentage Share of Western Germany and the United Kingdom in Tonnage of Ships being built in Western Europe for Registration in other European Countries^a

	United Kingdom	Western Germany
June 1954	41	12
December 1954	38	13
June 1955	34	17
September 1955	33	22

Source: Calculated from Lloyd's Register Shipbuilding Returns.

^a Ships built for registration in the building country itself are excluded from this calculation.

² Data for Denmark include other transport equipment.

³ In October 1955, since the suspension of trade negotiations, Sweden has again started to restrict automobile imports from western Germany.

⁴ A further indicator of the competitive advantage of western German shipyards is provided by several British orders recently placed in western Germany.

¹ The dock strike in October 1954, to the extent that it was still reflected in the trade returns for the early months of 1955, may cause a small bias in the figures in favour of the United Kingdom.

TABLE 1

Share of the United Kingdom and Western Germany in Imports into Selected Western European Countries, by Major Commodity Groups

Percentages of total imports from all sources and changes in percentage points ^a

Commodity group Importing country	ELECTRIC MACHINERY				OTHER MACHINERY				ROAD MOTOR VEHICLES			
	Percentage share in January-May 1955		Change from January-May 1954 in percentage points		Percentage share in January-May 1955		Change from January-May 1954 in percentage points		Percentage share in January-May 1955		Change from January-May 1954 in percentage points	
	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany
Sweden	14	47	0	+4	27	36	-2	-2	21	50	-18	+22
Denmark	16	29	-7	+2	26	35	-2	-1	19 ^b	37 ^b	-4	+1
Norway	21	34	+1	0	27	28	-1	0	24 ^c	28 ^c	+3	-2
Netherlands ^e	12	36	-4	+3	22	38	+2	-1	19	39	-4	+3
Belgium-Luxembourg	9	29	-1	+2	16	35	-3	+6	12	32	-1	-2
France	12	27	-3	+7	16	28	-1	0	20	22	-5	-6
Switzerland ^e	8	54	-2	+8	9	56	+1	+1	14	45	+3	0
Italy	11	36	-3	+5	14	37	-3	+2	20	39	-1	-5

Commodity group Importing country	HEAVY TRANSPORT EQUIPMENT				CHEMICALS				TEXTILES			
	Percentage share in January-May 1955		Change from January-May 1954 in percentage points		Percentage share in January-May 1955		Change from January-May 1954 in percentage points		Percentage share in January-May 1955		Change from January-May 1954 in percentage points	
	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany	From United Kingdom	From Western Germany
Sweden	15	12	-3	-5	14	22	-3	0	17	26	-2	+2
Denmark . . . . .	..	..	..	..	17	28	0	-5	25	28	-1	+3
Norway	29 ^d	12 ^d	+2	-9	20	20	+3	+1	22	24	-3	+3
Netherlands ^e	10	40	-23	+19	15	28	-3	-1	7	11	-2	-1
Belgium-Luxembourg	4	22	-25	+5	11	20	+1	+1	10	9	-6	-1
France	3	19	-11	+16	8	22	-1	+3	16	13	+3	+5
Switzerland ^e	6	84	+2	+32	..	..	..	..	..	..	..	..
Italy	9	21	-47	+13	12	29	+2	+2	27	16	-3	+3

^a Difference between the percentage share in January-May 1954 and in January-May 1955. Percentage figures are based on current values.

^b Includes all transport equipment.

^c Including heavy transport equipment except ships.

^d Ships only.

^e January-June.

The figures for textiles, the field in which the United Kingdom has traditionally dominated major import markets, also indicate a considerable German advance between the two periods compared in Table 1, mainly at the expense of the United Kingdom. In the Netherlands and the three Scandinavian countries, western Germany's share of the import market is now considerably larger than that of the United Kingdom although the opposite was true as recently as 1953.

The competitive losses of the United Kingdom appear to be less serious in the case of chemical products, as far as can be judged from the data presented in the table. Although comparisons relating to such a heterogeneous group of commodities must be made with caution, it appears that the United Kingdom has gained a relative price advantage in its exports of chemical products; as can be seen from Table 2 British export prices seem to have fallen by about 20 per cent since the first quarter of 1954, while the decline in the

TABLE 2

Export Prices of Industrial Manufactures in Selected Western European Countries

Index numbers: first quarter 1954 = 100

F — fixed weights
M — moving weights
C — crossed weights

Country and type of index Commodity group and period	United Kingdom	Western Germany	France ^b	Switzerland	Sweden	Belgium-Luxembourg	Italy	United States
	F ^a	M	M	M ^c	C	M	F	C
<i>Total manufactures</i>								
1954 First quarter . . .	100	100	100	100	100	100	100	100
Second quarter . . .	99	99	100	99	99	97	99	100
Third quarter . . .	100	97	98	99	99	96	97	99
Fourth quarter . . .	99	98	98	98	98	95	99	99
1955 First quarter . . .	101	100	98	98	102	98	98	100
Second quarter . . .	102	100	105	97	101	100	97	101 ^d
July/August . . .	103	101	102	..	..	100 ^e	..	..
<i>Engineering products</i>								
1954 First quarter . . .	100	100	100	100	100	..	..	..
Second quarter . . .	100	99	100	99	91	..	..	..
Third quarter . . .	101	98	97	99	101	..	..	..
Fourth quarter . . .	101	97	100	97	97	..	..	..
1955 First quarter . . .	101	99	96	98	93	..	..	..
Second quarter . . .	102	99	102	94	92	..	..	..
July/August . . .	103	100	..	96	..	..	..	..
<i>Chemicals</i>								
1954 First quarter . . .	100	100	100	100	..	..	..	..
Second quarter . . .	98	98	100	95	..	..	..	..
Third quarter . . .	83	97	89	101	..	..	..	..
Fourth quarter . . .	81	98	97	100	..	..	..	..
1955 First quarter . . .	80	99	94	98	..	..	..	..
Second quarter . . .	78	97	96	94	..	..	..	..
July/August . . .	..	96	..	94	..	..	..	..
<i>Textiles</i>								
1954 First quarter . . .	100	100	100	100	..	..	..	..
Second quarter . . .	102	99	98	101	..	..	..	..
Third quarter . . .	101	96	98	97	..	..	..	..
Fourth quarter . . .	98	97	98	99	..	..	..	..
1955 First quarter . . .	100	99	96	104	..	..	..	..
Second quarter . . .	101	97	98	101	..	..	..	..
July/August . . .	100	100	..	98	..	..	..	..

^a Except for chemicals, which are with moving weights.

^b While French series by sub-groups include some semi-manufactures, the index for total manufactures relates to finished products only (for instance, chemicals are not included in the total index).

^c Except for total, for which figures are calculated with fixed weights.

^d April-May.

^e June-July.

export prices of other countries seems to have been much smaller.

Various explanations have been offered in recent discussions for the continuing gains of western German exports vis-à-vis those of the United Kingdom; among the common ones are the granting of better credit terms, shorter delivery periods and, in the case of western Europe, the alleged fact that this area forms a "traditional" or "natural" market for western Germany. Long-established trade ties, habit and cultural or taste preferences certainly have some relevance; Austria, for instance, imports from western Germany nine times as much, and Switzerland four times as much, as from the United Kingdom. With regard to credit terms, it has been pointed out that British exporters have fully comparable credit facilities at their disposal¹ and that the cost of short and medium-term credit in western Germany (6 to 8 per cent) is much above that in Britain. On the other hand, the steady progress of western German exports in European countries may be connected with the fact that at the end of 1954, 62 per cent of the credits granted by the German "AKA" credit organization ("Ausfuhrkredit Aktiengesellschaft") were in Europe, against 41 per cent a year earlier; the total volume of credits has remained stable.²

It would seem that differences in price development have also contributed to recent shifts in trade. It has already been pointed out that for chemicals, the commodity group for which exports have kept their share of markets better than for other manufactures, British prices seem to have fallen more than those of other countries. The information contained in Table 2 suggests that the opposite has been true, though with a smaller margin of difference, for both engineering products and textiles; in the case of both groups, export prices of other countries have developed more favourably during the years 1954 and 1955 than those of the United Kingdom. However, differences in the methods of calculation and coverage of the various indices make comparisons uncertain.

In the periods used for the comparisons in Table 1 (the first five months of 1954 and 1955) export shipments in the United Kingdom either contracted or remained stable in several indicative, if not always quantitatively important, commodity groups (such as motor cycles, various electric appliances, etc.) while home deliveries expanded greatly. This development may be a sign not of a lack of competitiveness in foreign

markets but of the damage caused to exports by too buoyant a home market. It is worth noting, however, that the share of exports in total turnover has recently been falling in both the machinery and automobile industries in western Germany. This may be a sign that the internal boom in investments and consumption of durables is beginning to act as a brake on exports in western Germany too, but it may also be a sign that export markets in general are beginning to be less expansive than before so that a cutting down of demand on the home market might tend to stop the growth of production, instead of providing a stimulus for the expansion of exports.

Export Difficulties in the United States Market

While United States exports to Europe, as mentioned above, increased by 30 per cent, from the first half of 1954 to the corresponding period of 1955, United States imports from western Europe rose much less and were in the second quarter of 1955 only 6 per cent higher in value than in the corresponding period of 1954. For two important commodity groups, textiles and precious stones, western European exports increased by one-third and one-half in value respectively. On the other hand, the rising trend of western European exports of foodstuffs to the United States appears to have been reversed, largely owing to smaller exports of meat products. Another commodity group for which United States imports have been declining is watches and clocks; the fact that these imports have fallen to \$26 million in the first half of 1955 (from \$30 million and \$37 million in the corresponding periods of 1954 and 1953, respectively) reflects, without any doubt, the increase in tariffs imposed in July 1954.

The decision reached in the late summer to increase duties on imported bicycles, even if moderately, added another handicap to European exports to the United States and a discouragement to efforts to expand sales of other goods in that market. The bicycle case (which had once before been dismissed without an increase in duties) was only the second important instance in the last two years where an escape clause complaint by an American industry had ended in a tariff increase, and numerous cases had been dismissed during the same period. Both of the commodities on which increased duties have recently been imposed are, however, fairly important western European dollar earners, whereas most other recent complaint cases concern commodities for which western Europe's exports are small or insignificant.

Table 3 summarizes western Europe's export results for eighteen commodities for which escape clause

¹ See, for instance, *Bulletin of the Credit Insurance Association Ltd.*, London, May-June 1955.

² AKA credits outstanding in European countries were \$84 million at the end of 1953 and \$125 million at the end of 1954.

TABLE 3

Imports from Western Europe into the United States of Products¹ recently under "Escape-clause" Investigation
Millions of current dollars (f.o.b.) and percentages

Result of investigation and commodity affected	Major suppliers in western Europe	1948	1953	1954	Imports from western Europe as percentage of total imports of commodities listed		
					1948	1953	1954
1. <i>Duty increase approved</i>							
Watches and parts	Switzerland	49.5	72.2	55.7	100	100	100
Bicycles	U.K., France, W. Germany	0.8	16.2	23.6	76	99	99
Sub-total		50.3	88.4	79.3	99	100	100
2. <i>Increase or quota recommended by Tariff Commission, but rejected by President</i>							
Lead and zinc	Yugoslavia, Italy, Belgium	19.6	36.5	19.4	13	17	9
Ground fish fillets, fresh or frozen	Iceland	0.7	5.8	8.2	6	33	36
Hand-made blown glassware	W. Germany, France, Italy	1.4	3.3	3.2	70	80	79
Nail clippers, shears and scissors	W. Germany, U.K.	0.1	1.6	1.7	95	97	97
Tobacco pipes and tobacco pipe bowls of wood or root	U.K., France, Italy	0.5	0.9	0.8	92	100	100
Wood screws of iron or steel	Belgium, W. Germany	—	0.7	0.5	—	79	75
Clothespins, spring	Sweden, Denmark	0.5	0.4	0.4	100	99	98
Sub-total		22.8	49.2	34.2	14	20	14
3. <i>Increase or quota recommended by Tariff Commission, but further study requested by President</i>							
Silk scarves	Italy	—	—	0.1	—	—	1
4. <i>No modification recommended</i>							
Chicory, ground or prepared	Belgium, France	0.1	0.4	1.0	100	100	100
Carding, spinning, etc., machinery for cotton	U.K., Switzerland	0.5	0.4	1.0	100	100	100
Rosaries and other articles of religious devotion	Italy, France	0.5	0.7	0.6	68	66	68
Safety pins	U.K.	—	0.3	0.3	69	100	100
Mustard seed, whole	Denmark, U.K.	0.6	0.4	0.3	54	27	19
Dressmakers' pins	U.K.	—	0.1	0.2	80	99	99
Hardwood plywood	Finland, France, W. Germany	—	4.3	5.0	1	21	15
Glue of animal origin and gelatin	W. Germany, U.K.	1.0	2.9	2.0	50	80	76
Sub-total		2.7	9.5	10.5	29	35	26
TOTAL		75.8	147.1	124.0	35	41	34
<i>Of which imported from : ^a</i>					Imports of commodities listed as percentage of total imports from each country		
Switzerland		49.5	70.0	53.1	47.8	43.9	36.3
United Kingdom		2.7	15.5	17.4	0.9	2.9	3.5
Western Germany		0.2	12.7	13.4	0.6	4.6	4.8
Yugoslavia		1.4	15.1	10.8	29.7	47.8	43.7
Iceland		0.6	4.5	6.9	14.8	61.5	67.5
France		0.5	2.3	3.4	0.7	1.2	2.2
Finland		—	2.7	3.3	0.1	6.4	8.3
Italy		10.3	7.1	3.0	11.4	4.5	2.1
Belgium-Luxembourg		5.2	6.3	3.0	5.0	2.7	1.6
Netherlands		1.8	2.7	2.1	4.0	1.4	1.3
Denmark		0.1	0.7	1.7	1.6	1.7	3.3
Spain		0.9	2.0	1.4	2.5	3.1	2.1
Austria		—	0.3	1.0	0.1	0.9	3.5
Sweden		0.6	0.9	0.9	0.7	0.8	1.1
Norway		0.7	2.3	0.7	2.1	3.4	1.3
Other western European countries		1.3	2.0	1.9	1.3	1.7	1.8
TOTAL		75.8	147.1	124.0	7.2	6.5	6.1

Sources: United States trade statistics; *Thirty-eighth Annual Report of the United States Tariff Commission*, Washington, D.C., 1955.

NOTE.—Commodities covered by the table are those for which escape-clause complaints have been lodged and investigation started between July 1953 and September 1954. Alsike clover seed and coconuts, which were not im-

ported from western Europe, have been excluded. A complaint concerning acid fluorspar (imports of which from Western Europe were \$4.4 million in 1954) has been withdrawn by the complainant.

^a Countries are arranged in descending order of magnitude of 1954 imports.

complaints have been lodged by American industries since July 1953.¹ It can be seen that the exports thus challenged² amounted to about \$125 million or six per cent of western Europe's total exports to the United States in 1954. Of this amount, the two commodities for which duties have been increased accounted for

¹ Three commodities for which there were no imports from western Europe have been excluded from the table. For statistical reasons, the figures sometimes include sub-divisions of a commodity which were not directly referred to in the original complaint.

² It should be pointed out that the table covers only escape clause investigations proper (based on Section 7 of the Trade Agreements Extension Act of 1951) and not quota restrictions or duty changes resulting from other procedures. Even when an escape clause complaint has been dismissed at some stage of the United States investigation procedure, an element of insecurity remains, as the original complaint can easily be resurrected. Thus, duty modifications in both watches and bicycles came only after the completion of the second investigation.

\$80 million, while \$33 million consisted of products for which recommendations of the Tariff Commission in favour of duty increases have been rejected. A further disturbing factor has been the impact of these tariff investigations on the exports of particular countries. The products that have been under investigation recently accounted in 1954 for 68 per cent of Iceland's exports to the United States (groundfish fillets), 44 per cent of Yugoslavia's (lead and zinc), 36 per cent of Switzerland's (watches) and 8 per cent of Finland's exports (plywood).³

³ Another item affecting Finland has been hardboard, where the American industry did not feel itself sufficiently threatened to initiate a full-scale escape-clause inquiry. Instead, the Congress attempted to double the duty on the product by a change in customs classification; this change, however, was abandoned after a direct appeal from the President. Hardboard imports from Finland amounted to \$280,000 in 1954, or less than one per cent of total imports from that country.

2. THE PROBLEM OF MAINTAINING PRICE STABILITY

Changes in Wages and the Cost of Living

The stability of prices has been one of the outstanding features of the present upswing. In five of the twelve western European countries included in

Table 4, no significant increases have occurred in the cost of living, and in the others the increases have amounted to only between 4 and 7 per cent over the whole period of two years' strong industrial upswing. In spite of this remarkable stability of prices there has

TABLE 4 Index Numbers of Industrial Wages and Cost of Living

April-September 1953 = 100

Country	Wage rates in industry (Figures in parentheses represent hourly earnings)					Cost of living				
	1954		1955			1954		1955		
	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr. ^a	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	August
Netherlands ^b	109	116	116	116	116	104	105	107	106	106
Sweden	(104)	(106)	(107)	(114)	(..)	101	101	101	102	104
Norway	(104)	(107)	(107)	(113)	(..)	103	104	104	104	105
United Kingdom	105	106	108	112	113	102	103	104	105	106
France	106	107	110	111	114	99	100	101	101	99
Austria	106	107	108	108	109	105	106	108	105	107
Western Germany	(102)	(104)	(105)	(108)	(109) *	100	102	101	101	102
Denmark	(103)	(106)	(..)	(..)	(..)	101	102	103	105	106 ^c
Finland	103	103	104	107 *	107 *	101	97	95	96	97
Italy	105	106	107	107	107	103	104	104	106	106
Belgium	103	104	104	105	..	99	98	98	98	99
Switzerland	101	101	101	101	..	101	102	101	101	102

NOTE.—Wage rates are generally those in force during the middle month of each quarter, and refer to men and women. Industry includes mining, manufacturing and building, except for Sweden and Norway, where building is excluded, and the Netherlands, where mining is excluded.

^a Based on latest available data (either July or August).

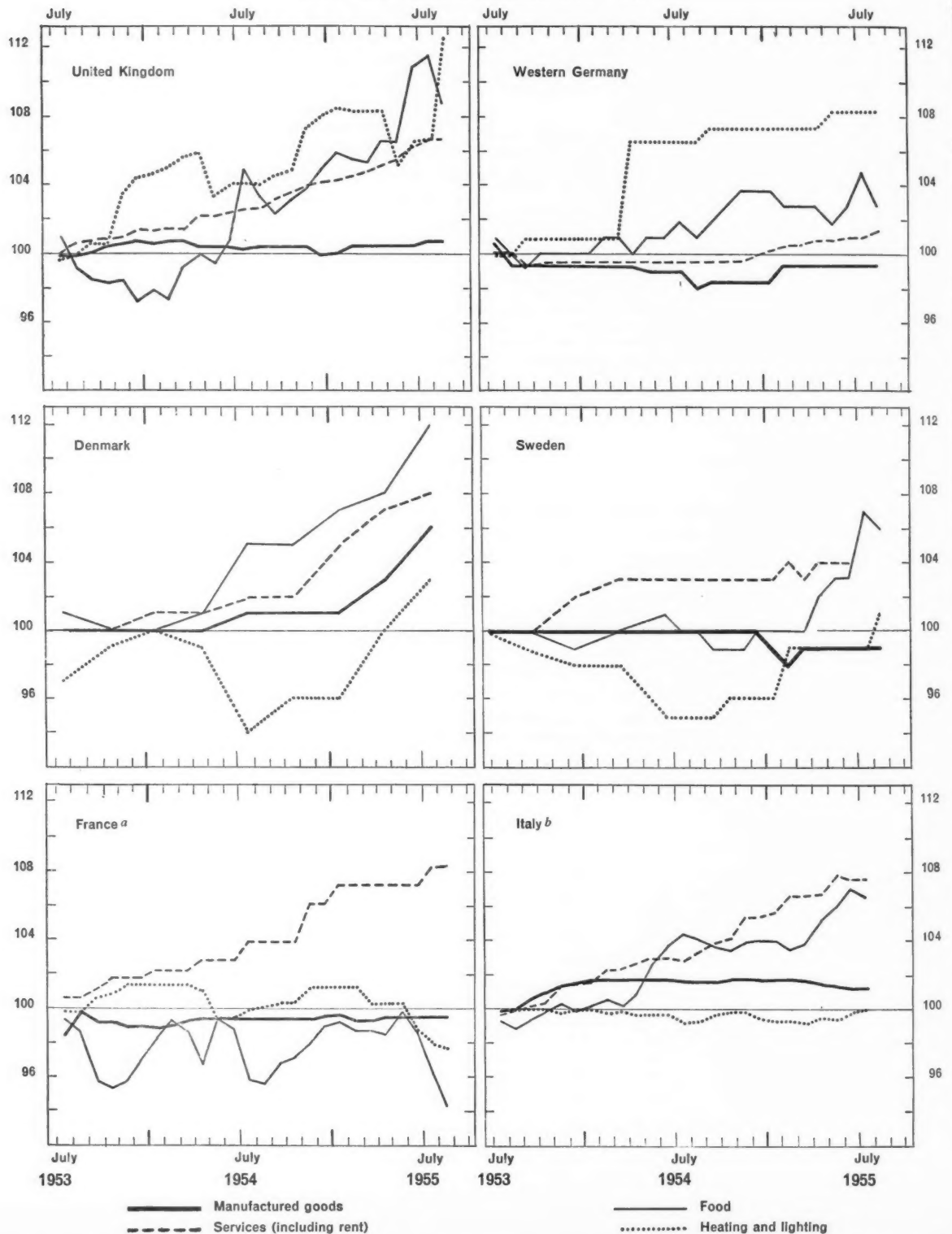
^b Wage rates refer to men only.

^c July.

CHART 4

Major Components of the Cost-of-living Index Numbers for Selected Western European Countries

Index numbers : April–September 1953 = 100



^a The series for food does not cover fruit and vegetables, since these items are excluded from the official French cost-of-living index used for this chart.

^b Manufactured goods cover clothing only; other household goods are included under services.

been continuous talk of the danger of inflation, in particular each time upward revisions of wages have taken place.

In most western European countries industrial wages have risen by between 5 and 10 per cent during the whole of the upswing, as can be seen from Table 4. In the Netherlands, Norway, Sweden, the United Kingdom and France, however, average wage increases have been of the order of 12 to 15 per cent,¹ and in the three last countries particularly large recently. The rate of increase in the other western European countries has not accelerated, and in some instances has even slowed down in 1955, though it may be that in some countries—e.g. Austria—wages actually paid may have risen more than negotiated wage rates. Where wage increases have been large they have been partly matched by more rapid rises in the cost of living. The exception is France, where, owing to the extraordinary stability of the price level, real wages seem to have increased more since 1953 than in the other countries of western Europe.

Some idea of the reasons for the upward movements of the cost of living and the differences in the rates of increase between countries can be gleaned from Chart 4. In this chart changes in the major components of the cost-of-living index are shown for the United Kingdom, Sweden, Denmark and Italy, the only countries where the increases in the cost of living over the last year have exceeded two per cent, together with western Germany and France. It appears clearly from this chart that the prices of industrial manufactures are the most generally stable component of the index. They are lower now than two years ago in western Germany, Sweden and France and only slightly higher in the United Kingdom and Italy,² while the rise in Denmark is partly due to an increase in indirect taxes. This suggests that the wage increases have been largely absorbed, and sometimes more than fully absorbed, in industry where increases in productivity have been relatively large and competition is more pronounced. Such upward pressure on the cost of living as there has been stems from the sectors in which a sheltered position, owing to protection or to strong pressure of demand, makes it possible to shift increases in labour costs on to the consumer. Prices of both food and services have gone up considerably more than those of industrial manufactures everywhere except in France, but it should be noted that part of the increase in prices of services has been caused by

upward revisions of rent³ and part of the increases in prices of food by abolition of subsidies.⁴ The greater stability of the cost of living in France is due to the fact that prices of both food and fuel have declined. These decreases are in part due to a more favourable supply position than in other countries and in part to the fact that the prices of electricity and gas and the taxes on certain basic food items have been reduced in order to help keep down the cost of living.⁵

It was seen above that increases in the cost of living have been mainly due to price rises in those sectors of the economy—such as agriculture, the fuel industries and services—where increases in productivity are generally less than the average. Unfortunately, few figures are available on output per manhour in the manufacturing industry,⁶ but there can hardly be any doubt that during the present industrial upswing, it has risen more than industrial wages in western Germany, Austria, Italy, Switzerland and Belgium, and this may also be true in some industrial branches in other western European countries. Frequent complaints are heard, however, that wage increases which are related to increases in productivity in the more efficient sectors and enterprises—where they can be easily absorbed without an increase in sales prices—have to be paid also where productivity has been improving less rapidly, whether the actual mechanism by which this is brought about is a general round of wage increases or competitive bargaining by sectors or enterprises. If in that case the low-productivity sector or enterprise enjoys virtual protection against competition, the general price level is bound to go up unless there is a compensating downward movement of prices in the industries with above average increases in productivity. It would appear from Chart 4 as well as from Table 2 that such a regular, although slow, decline in the prices of manufactured goods took place during 1954 in nearly all of the countries for which information is available, but that in 1955 this trend has been reversed.

For engineering products this reversal of the price trend is probably a reflection more of the pressure of demand on the metal-using industries than of changes in costs. It is interesting to note that in Sweden and Switzerland which face strong competition both at home and in foreign markets, prices of engineering products are considerably lower than at the beginning

¹ Because of the increasing use of overtime work paid at higher rates the figures for hourly earnings in the table overstate the increase in wage rates.

² The series shown in the chart for Italy includes prices of clothing only; prices of household goods are included in the series for services.

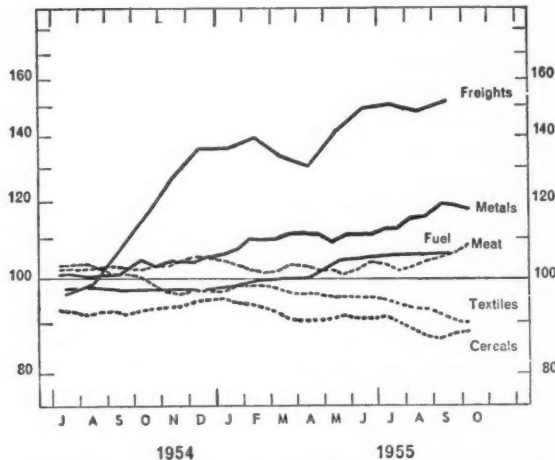
³ See *Economic Bulletin for Europe*, Vol. 7, No. 2, 1955, p. 5.

⁴ This was true of the United Kingdom and Denmark.

⁵ Similarly, the fall in the cost of living in Finland in the fourth quarter of 1954, shown in Table 4, is due to increases in subsidies and reductions in turnover taxes.

⁶ See *Economic Bulletin for Europe*, Vol. 7, No. 1, 1955, pp. 12 and 13.

CHART 5
World Commodity Prices and Freight Rates
Index numbers : April–September 1953 = 100
Semi-logarithmic scale



NOTE. — The series for freight rates (trip charter) has been taken from *Norwegian Shipping News*. All other series, except fuel, have been taken from *World Commodity Survey (Frankfurt)*. The series for fuel has been derived from export prices (f.o.b.) of coal in France, western Germany, Poland, the United Kingdom and the United States, combined with export prices f.o.b. U.S. Gulf of distillate and residual fuel oil.

of 1954 (see Table 2). It is true that world market prices for steel and other metals started to go up in the autumn of 1954—according to the index reproduced in Chart 5 they have since increased by nearly 20 per cent—but this increase too seems to reflect demand pressure rather than cost increases. In any case, non-ferrous metals, which are the ones that have gone up most in price, have little weight in the total costs of the engineering industries and domestic prices for steel in the big producing countries have increased very little.

For textiles there is no question of pressure of demand and, consistently with the hypothesis advanced above, the information in Table 2 also indicates that the tendency to a reversal of the price trend in 1955 has been much weaker for textiles than for industrial manufactures in general. The difference is, however, less pronounced than in the case of raw materials, where the different trends of metal and textile prices in Chart 5 bear witness to the boom in investment goods and consumer durables and the crisis in the textile industry, as well as to the differences in the supply situation of their respective raw materials. The increasing gap between the declining prices of textile raw materials and the fairly stable prices of finished articles seems to indicate that in the textile industries the increase in productivity has been too small to compensate for the increase in wages.

Tendencies to Increases in Stocks

It is obviously of crucial importance for an evaluation of the present economic situation and the prospects of a continuance of the boom to know what has happened to stocks of raw materials and finished manufactures in the recent past. The available data are very scanty and deficient and in many cases seriously out of date; nevertheless, an attempt has been made to bring together in Table 5 the major fragments of information, using both conventional statistical series and the results of qualitative answers to enquiries put to samples of business men in some countries.

With due regard to the paucity of the data, it should be noted that instances of increases in stocks shown are considerably more numerous than might have been expected on the basis of widely publicized complaints of shortages. The very general and apparently big increase in stocks in France is particularly notable, but in nearly all the other countries included in the table stock increases have outnumbered decreases in the most recent period shown.

The table has to be interpreted in the light of the differences between the situation in the textile industry and that in other industries which are clearly revealed in the stock figures. The increases in the holdings of textile raw materials in all countries except the United Kingdom and Italy are certainly involuntary and do not arise from the desire to be assured of adequate supplies. Similarly, the numerous examples of increases in stocks of textile semi-manufactures and manufactures over last year's level are no doubt a reflection of continued sales difficulties. In most cases, however, the increases over last year's level are smaller than they were six months ago and in western Germany and the Netherlands stocks of finished textiles are now lower than a year ago. Since information about wholesale or retail stocks of textiles is only available for the United Kingdom and western Germany, it would be rash to draw conclusions about the future development in the textile industries from these data, but it is worth noticing that the limited picture they give is not too black.

Most of the stock figures for commodities other than textiles relate to products used or produced in industries where demand is so strong—or even excessive—that the stock increases which have taken place can safely be interpreted as voluntary and as signs of improvement in the supply situation. It is therefore very interesting to note how frequent these increases are even for fuel and in the metal and building industries. Not only do positive entries preponderate for the period mid-1954 to mid-1955 but in most cases the

stock decreases have become smaller or turned into increases, and the stock accumulations have become more pronounced between the two periods of comparison given in the table. The main exceptions to this statement are pithead stocks of coal and iron ore.

There seems to have been a tendency, as is to be expected during a boom, for stocks to be held by the users, and not the producers, of the commodity concerned. This tendency, arising from the fear felt by users of shortages and price increases of raw materials, itself contributes to bringing about the phenomena they fear. Thus it seems likely that part, at least, of the price increase for metals is due to precautionary stocking up rather than to actual shortages. This speculative outlook of users leads to a certain under-estimation of the sufficiency of the available supplies and to exaggerated talk of shortages, although part of the increase in stocks during a boom represents, of course, genuine requirements in view of expanded production.

In the timber trade a real over-buying by importers in excess of current requirements appears to have taken place and consumer resistance against high timber prices, combined with financial pressure on the importers through increases in interest rates, has recently exerted a downward pressure on prices. In the metal-using industries also the table gives no indication that raw material stocks are too small. They seem to be above last year's level in all the countries for which information is available—the United Kingdom, western Germany, France, Denmark and Norway—and it may be that the decline in new orders for steel in Germany and Belgium is due to factors other than refusals to accept orders. In spite of the fact that stocks of finished steel in the United Kingdom are slightly above the level of last year, the supply situation is very tight in some particular types of steel.

It is rather surprising that distributed stocks of coal in both the United Kingdom and western Germany are above last year's level, and that French pithead stocks still remain at a very high level. The explanation for the increasing coal stocks lies mainly in the rapid growth of coal imports from the United States. The continuously increasing influx of American coal, although preventing a shortage in Europe, nevertheless constitutes some danger for the European price level because of its effect on freight rates. Chart 6 illustrates the very close correlation between the changes in coal shipments across the Atlantic and those in freight rates which arise from the shortage of shipping capacity. Through the medium of freight rates the European price level is pushed up also for many commodities other than coal and, moreover,

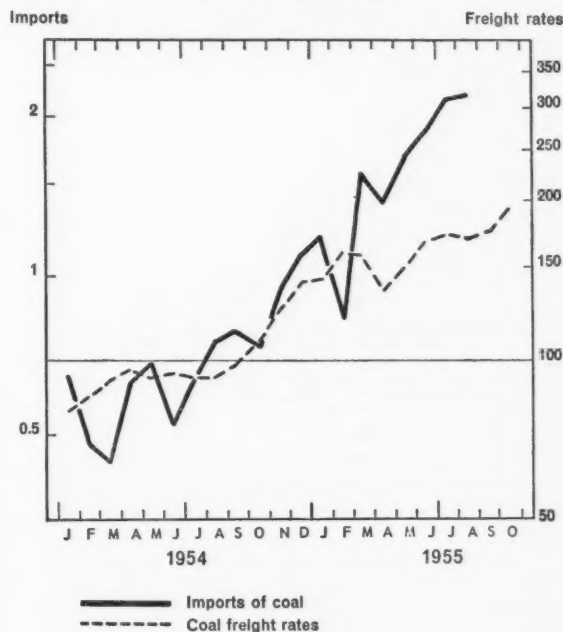
CHART 6

**Western European Imports of Coal
from the United States
and Transatlantic Coal Freight Rates ^a**

Imports in millions of tons and index numbers of freight rates

Average 1954 = 100

Semi-logarithmic scale



^a Rates paid for single voyages from Hampton Roads to Antwerp/Rotterdam.

the rising coal prices in Europe have induced producers of mineral oil to raise their prices.

It would be hazardous to draw very firm conclusions from the scattered information available about stock changes in western Europe,¹ but it seems to indicate that if speculative stocking can be prevented there may be little danger of bottlenecks in the supply of industrial materials in the near future.

The Choice of Policy Measures to Control the Boom

The desirability of preventing speculative stocking at the present stage of the industrial upswing obviously makes it important to control short-term credits. During the summer a number of countries tightened their credit policy in addition to those which

¹ The shortage of published information on stocks in western Europe is discussed in detail in a later article in this BULLETIN.

Changes in the Volume of Stocks
Percentage changes since the corresponding period of the previous year

	United Kingdom		Norway		Denmark		Netherlands		Belgium
	End-1954	Mid-1955	End-1954	Mid-1955	End-1954	Mid-1955	End-1954	Mid-1955	Mid-1955
Hard coal : Pithead stocks	- 39	+62 ^a					+35		
Distributed stocks	- 11	+ 9 ^a	-27	-32	- 6	+ 8			
of which: with industry	- 8	+4 ^a							
Crude petroleum									
Motor spirit			- 4 ^c	+12 ^c	+46	+54			
Kerosene					- 7	-20			
Gas oil									
Fuel oil			-36 ^c	- 6 ^c	+23	+52			
Iron ore (at mines)									
Scrap	+ 6	-10	-21	- 4	+ 2	-11			
Crude steel	- 19	- 6	+37	+11					
Finished steel	- 3 ^d	+ 3 ^d	- 4	+11	- 6	+ 6			
Refined copper	+ 11	+48			- 7	- 4			
Copper semi-manufactures			+ 5	+12	+24	+28			
Metal-making industries : Raw materials									
Finished products									
Metal-using industries : Raw materials									
Finished products									
Timber : Sawn softwood	0	+ 7			+14	+21			
Sawn hardwood	- 3	- 2			+ 9	- 3			
Wood-pulp	- 1	+18			+ 7	+14			
Bricks	+131	+18	-60	+ 4			-27	+ 2	
Cement	+ 72	+22	-20	+ 6			-37	-35	
Rubber	- 20	-19			+11	+12			
Sulphuric acid	+ 1 ^f	- 4 ^f							
Chemical industries : Raw materials									
Finished products									
Raw wool	0	- 1	- 8	+25	+ 9	+25	+ 3	+16	
Raw cotton	- 25	-36	+ 1	+57	-12	+ 1	+ 7	+14	
Textile yarns			+ 2	- 8	- 6	-19			
Textile fabrics					+ 7	+ 3	+11 ^{hi}	-15	
Textile industries : Raw materials									
Finished products									
Clothing industries : Raw materials									
Finished products									
Consumer-goods industries : Raw materials									
Finished products									
Total manufacturers' stocks : Raw materials			- 2	0 ^k					
Finished products			- 8	-16 ^k					
Total wholesalers' stocks			-13	- 1 ^k					
of which: Textiles and clothing	+ 7 ^l	- 5 ^l							
Total retailers' stocks									
of which: Textiles and clothing	+ 5 ^l	+ 3 ^l							
Total stocks			- 4	- 2 ^k	- 1 ^m	+ 2 ^m			

Sources: The sources for the conventional stock statistics are those indicated in Appendix X to "Short-term Business Indicators in Western Europe" in this Bulletin. Information has been received directly from Norway, in advance of publication. The sources of the *Konjunkturtest* data are: Western Germany—*IFO Schnelldienst*, IFO-Institut für Wirtschaftsforschung, Munich; France—*Etudes et Conjoncture*, March 1955, No. 3, and August 1955, No. 8; Sweden—information received directly.

NOTE.—The coverage of the stock data may vary from country to country. Unless otherwise specified, stocks of raw materials are those held by importers

or consuming industries or both, whereas for semi-manufactured and manufactured products the stocks are generally those held by producers.

The data for the middle of the year 1955 refer to the end of June, July or August, unless otherwise specified.

For the *Konjunkturtest* data a rough attempt has been made to distinguish between moderate and marked increases or decreases such that: ++ (---) represents a marked increase (decrease), + (-) a moderate increase (decrease) and = represents no change.

h End of May.
i Wool fabrics.
j Cotton goods.
k End of March.
l Basic data given in value.
m Excluding sugar.

had done so during the spring. Discount rates have been raised in western Germany, Austria and Belgium and in the former country the reserve requirements of the banks have simultaneously been raised. Moreover, in the United Kingdom credit policy was made much more restrictive in July.

At the time of writing, France and Italy remain the only ones among the industrialized countries of western Europe in which monetary policy does not seem to have been tightened during the present upswing. This may be one reason why speculative stocking, as it seems, has gone further in France than elsewhere, though the effectiveness of even high interest rates in preventing stocking-up in a period when price increases are expected can easily be over-estimated.

The increasing frequency of changes in interest rates has been widely interpreted as an indication that more and more countries are coming to rely on the price mechanism in their monetary policy. This is, however, an over-simplification. In fact, the method by which bank credits are effectively limited in practically all countries of western Europe continues to be that of refusing credits, and the raising of interest rates is mainly a means of supporting this system of credit rationing. In some countries the banks have been instructed by the Government or by the Central Bank to reduce the amount of outstanding credits by a certain percentage and to give preference to certain categories of borrowers and certain purposes of borrowing; in other countries the instructions have been less specific. In either case, there is the danger of maldistribution of credits through the almost inevitable preference given to old and influential customers.

The increasing reliance on credit policy as a means of controlling demand is in part to be explained by the fact that it can be put into operation quickly, while changes in taxation or in the volume of public investment expenditure depend on more or less time-consuming political and administrative arrangements. There have been very few attempts to curtail public investments during the present upswing and little use of disinflationary fiscal policies, although it is true that in the Scandinavian countries a restrictive monetary policy has been reinforced by fiscal measures. In western Germany, Austria, the United Kingdom and, more recently, in the Netherlands and Finland, the tendency has even been for taxes to be reduced. In western Germany, incomes have increased so rapidly that the budget surplus has been increasing in spite of tax reductions, and claims for further tax reductions are now being voiced.

It is true of the large public investment programmes now being carried out, as well as of some of the recent

tax reductions, that they were decided on before the present upswing, or at least before it had become clear that an investment boom was going on. Moreover, the strong foreign exchange position of some of these countries, notably western Germany and the Netherlands, permitted them to run a calculated risk. By now the view that public investment programmes ought to be cut is becoming more and more widely held, and this opinion is naturally supported by industrialists, who resent the idea that the whole burden of restricting investment demand should fall on the private sector. It may be asked, however, whether the time for reducing public investment programmes is not now past: the 1955 building season is now over and it seems, as already noted in the Review Article of the August issue of this BULLETIN, that the peak in the construction of dwellings has been reached, or passed, in nearly all countries. If credit restrictions, and perhaps also the psychological influence of recent declines in share prices, slowed down somewhat other private investments, the balance between demand and supply in the investment sector might be re-established next year without any further cuts in public investments.

These comments would seem to be pertinent as a broad characterization of the situation in the industrialized countries of western Europe at the present juncture, although important qualifications are, of course, called for when the situation of any particular country is considered. In any case, experience seems to suggest two practical conclusions. One is that the considerable time-lag involved in changing the volume of public investments makes it very difficult to time such changes in accordance with the requirements of the cyclical situation. In other words, there is a danger that measures which were intended to attenuate cyclical swings actually accentuate them. This danger is increasingly being realized, and attention is being paid to the need for reducing it by the introduction of more flexibility in the political and administrative methods of dealing with public investments, as well as in taxation systems. The second conclusion is that more information is needed about current private investments and investment plans. In the absence of such information, public investments may fail to be reduced in time, and the result may be (as can be seen at present) that private investments have to be curtailed by monetary policy and other means. This has the disadvantage that it may result in an unintended reduction of the over-all volume of investments and not only in a shift of its timing, as would be the case if variations in the volume of public investments were more widely used as a measure of anti-cyclical policy.

3. CURRENT DEVELOPMENTS IN AGRICULTURE

It was shown in the preceding section that, in the countries where the cost of living rose significantly over the last year, the increase was primarily in agricultural products. Thus, relative price movements in Europe were in the opposite direction to those in the world market, where prices of most agricultural products have been declining continually under the pressure of large surplus stocks in the United States, while prices of most industrial raw materials and of manufactures have tended to increase.

Although the various systems used to support agricultural income cause variations in the price development of agricultural products from one European country to another, as well as variations from world prices, there are nevertheless certain common features in the development over the last year of the prices paid to farmers in western Europe. As can be seen from Table 6, cattle prices have been increasing nearly everywhere while wheat prices have declined a little, and, in most countries, pig prices have declined very considerably. The movements of milk prices have been less uniform. The general rise in cattle prices is understandable in view of the increase in consumer incomes, the relatively high income elasticity of demand for meat and the slowness with which domestic supplies are expanded. The decline in pig prices, which in most countries is of the order of 15 to 25 per cent, reflects, on the other hand, the large expansion in output following the excellent

1953 harvest. The relatively slight increase of food prices over the last year was thus the joint effect of declining pig prices and increasing cattle prices, and it is significant that the three countries, the United Kingdom, Sweden and Denmark, in which pig prices did not decline, are among the four countries which, in the preceding section, were shown to have had the largest increase in the cost-of-living index.

Sufficiently recent data are not available to show how the decline in pig prices will affect the production of pig meat, but on the basis of earlier experience it seems likely that pig numbers will decline in the next harvest year, notwithstanding the fact that the European harvest of coarse grain seems to be larger than that of last year. In that case prices of pig meat will increase from their present low level, and, since there is no reason to expect a reversal of the rising trend in cattle prices, it seems highly probable that the price tendency for food as a whole will be upwards, the more so as increases in milk and butter prices tend to become more frequent. They have recently occurred in France and Denmark and will do so in Finland and probably in Norway and Sweden.¹ The system of income parity for agriculture existing in Sweden will necessitate considerable increases in food prices as a

¹ In Italy, where the rise in national income has caused some pressure on the supply of beef, there is, on the other hand, a surplus of milk, and, for that reason, the tariff on cheese has been raised.

TABLE 6
Changes in Prices of Agricultural Products

Latest 3 months available over corresponding period of previous year

Country	Cattle	Pigs	Milk	Wheat	Latest available month
United Kingdom ^a	+11 ^b	+38 ^b	+2	+ 2 ^b	September (Milk, June)
Sweden	+ 6	+ 8	+1	-10	July (Milk, May)
Denmark ^c	+ 1	—	-1 ^d	- 5 ^e	August
Netherlands	- 4	-19	+8	- 2	August
Belgium	+ 4	-24	—	- 3	August (Milk, July)
France ^f	+13	-20	-1 ^d	- 5	August (Wheat, June)
Western Germany	+ 7	-16	+8	- 1	July (Milk, June; Wheat, August)
Switzerland ^g	+ 5	- 5	+2	—	August
Italy	+ 2	-13	—	+ 3 ^h	July

Sources: National statistics and *Monthly Questionnaire on Agricultural Statistics*, FAO.

NOTE. — Data refer to prices paid to producers, unless otherwise specified.

^a Excluding Government's guarantee payments.

^b Latest two months only, over corresponding period of previous year.

^c Beef: wholesale prices, Copenhagen Exchange. Pork: prices at co-operative slaughter-houses. Wheat: free market prices, Copenhagen Exchange.

^d Butter only.

^e June only.

^f Beef and pork: wholesale prices, market of La Villette. Butter: wholesale prices at the Halles, Paris.

^g Wholesale prices.

^h Soft wheat + 2 per cent. Hard wheat + 7 per cent.

counterpart to the reductions of agricultural incomes caused by the drought in the summer unless the government plan to replace it by a system of subsidies is accepted.

Seeing rapidly increasing urban incomes, the farmers in western Germany have claimed for an income parity policy, on principles similar to those applied in the United States and the Scandinavian countries. Such a policy, which might frustrate efforts to keep the cost of living stable, has not been adopted, but as a concession to the claims of agriculture promises have been made to raise the milk price and a system of regular annual reviews of the earning capacity of agriculture has been introduced, though without any guarantee that a parity between agricultural and urban incomes will be maintained. Since it is feared that the increase in the milk price may cause a decline in consumption, plans have now been

put forward to lower agricultural costs by tariff reductions on agricultural producer goods, probably as an alternative to the planned increase in milk prices.

The 1955 Harvest and the Prospects of Trade in Agricultural Products

As mentioned above, the western European harvest of coarse grain seems to be better than that of the preceding year. The wheat harvest, for which more complete information is available, would appear to be more than 2 million tons greater than last year, but half a million tons below the record harvest of 1953 (Table 7). Both in western Germany and in a number of southern European countries—Italy, Turkey, and Yugoslavia—where last year's harvest was rather bad, the 1955 harvest seems to be much

TABLE 7
Area and Production of Cereals in Western European Countries
Millions of tons and millions of hectares

Country	WHEAT						OTHER GRAIN ^a					
	1952 Prod.	1953 Prod.	1954 Area Prod.		1955 Area Prod.		1952 Prod.	1953 Prod.	1954 Area Prod.		1955 Area Prod.	
United Kingdom	2.34	2.71	0.99	2.83	0.80	2.44	5.19 ^b	5.43 ^b	1.88 ^b	4.76 ^b	1.98 ^b	6.19 ^b
Ireland	0.27	0.42	0.20	0.50	0.16	0.44	0.84	0.81	0.28	0.67	0.31	0.88
Norway	0.04	0.04	0.02	0.04	..	0.04	0.31	0.39	0.16	0.39	..	..
Sweden	0.77	1.00	0.43	1.03	0.35	0.75	1.40	1.76	0.80	1.55	0.79	1.30
Finland	0.23	0.22	0.15	0.25	..	0.20	1.22	1.35	0.74	1.23	..	..
Denmark	0.30	0.28	0.09	0.29	0.07	0.27	3.45	3.33	0.97	3.12	0.96	3.32
Netherlands	0.33	0.25	0.11	0.40	0.09	0.38	1.22	1.19	0.37	1.19	..	..
Belgium	0.58	0.57	0.19	0.59	0.20	0.72	0.96	0.97	0.31	0.94	..	..
France	8.42	8.98	4.49	10.57	4.55	10.29	5.57	6.37	3.79	6.61	3.79	6.58
Western Germany	3.29	3.18	1.11	2.89	1.17	3.47	7.49	7.91	3.21	8.49	..	8.48
Austria	0.40	0.50	0.24	0.45	0.24	0.50	0.93	1.10	0.56	1.02	..	..
Switzerland	0.28	0.25	0.10	0.30	0.10	0.26	0.17	0.18	0.06	0.17	0.06	0.16
Italy	7.88	9.05	4.77	7.25	4.75	8.60	3.30	4.26	2.06	3.89	..	5.00*
Spain	4.11	3.04	4.34	4.56	..	3.20	3.25	2.32	2.85	3.16	..	..
Portugal	0.58	0.69	0.77	0.75	0.76	0.70	0.87	0.77	1.20	0.81	..	0.68*
Yugoslavia	1.68	2.51	1.85	1.39	1.91	2.50*	2.17	4.95	3.41	3.68	..	..
Greece	1.05	1.40	1.03	1.22	1.04	1.34	0.61	0.80	0.68	0.69	..	0.73
Turkey	6.58	8.13	6.56	5.01	6.60	6.53	4.26	4.68	3.46	3.20	3.52	..
TOTAL of countries listed .	39.13	43.22	27.44	40.32	..	42.63	43.21	48.57	26.79	45.57	..	..
TOTAL of countries available in 1955			22.93		22.79		28.89	31.62	11.24	30.76	11.41	33.32

Sources : FAO, national statistics and estimates of areas and yields.

^a Including rye, barley and oats (but not mixed grain) for all countries and maize for Italy, Greece, Portugal and Yugoslavia.

^b Excluding rye.

more satisfactory. The harvest is poor in Spain, Sweden and Norway, while the decline in wheat production in the United Kingdom is due to a large reduction in the area and is more than compensated by a considerable increase in the output of coarse grains. The harvest of sugar beet seems in general to be greater than last year's owing to an increase in area, particularly in the southern European countries, while in France, where the area is slightly reduced, production will probably be about the same as last year.

In the industrialized countries of western Europe the consumption of animal products is so large a part of food consumption that changes in their supply and prices largely govern the movements of the cost of living and of agricultural incomes. This implies that the harvest result, whether good or bad, does not have decisive immediate effects on the economic situation, because there is a considerable time-lag between decisions to increase or reduce livestock numbers and the effects of these decisions on the production of meat.

In the southern European countries, on the contrary, the size of the harvest is a basic factor in the economic life, and its effects on the cost of living, on national income and on the balance-of-payments situation are both immediate and large. The relatively bad 1954 harvest in the countries around the eastern part of the Mediterranean was one of the factors which made inflationary pressure more serious in Yugoslavia and Turkey than in other European countries. In Yugoslavia, the food component of the cost-of-living index increased by 16 per cent from the summer of 1954 to the summer of 1955. Greece, with an increase of 7 per cent, also ranks among the countries with the most rapid increases in food prices in western Europe. The fairly substantial improvement in the 1955 harvest over that of last year in all these countries should make it easier for them to stave off inflationary tendencies. In Greece and Turkey, however, the system of government purchases of wheat at fixed prices tends to lessen the wholesome effect of abundant harvests on monetary stability, since, under this arrangement, a large crop tends to be associated with an increased deficit of public authorities.

As a result of the better harvest in the countries of south-eastern Europe the grain imports of these countries, which in the last harvest year amounted to some 2.5 million tons, will be considerably reduced. As only about 100,000 tons was bought in western Europe this import reduction will not have significant direct results on the outlook for western European grain exports. The western European grain exporters are more likely to feel the effects of the better harvests in western Germany and in eastern Europe, to each

TABLE 8
Trade between Eastern and Western European Countries
in Cereals and Meat
July 1954 — June 1955

Product and exporting area	Importing area	West. Europe	East. Europe	World
<i>Bread grain (million tons)</i>				
Western Europe		2.6	0.8 ^a	3.5
of which: France		1.7	0.6	2.3
Eastern Europe		0.9 ^b	2.3	..
of which: U.S.S.R.		0.7	2.3	..
World		14.7	..	..
<i>Coarse grain (million tons)</i>				
Western Europe		0.6	—	0.6
Eastern Europe		0.4 ^c	..	..
of which: Rumania		0.2	..	..
World		10.1	..	..
<i>Beef and veal (thousand tons)</i>				
Western Europe		122	35 ^d	164
of which: Denmark		40	13	55
France		24	10	40
Eastern Europe		—
World		357	..	..

Sources: Trade statistics of western European countries and answers to a secretariat questionnaire (document E/ECE/AGRI/26, 14 July 1955, United Nations, Geneva).

^a Of which about 60 per cent to Hungary and 30 per cent to Poland.

^b Of which about 25 per cent to Finland and 20 per cent to western Germany.

^c Of which about 25 per cent to Austria and 20 per cent to the United Kingdom.

^d Of which about 50 per cent to Czechoslovakia and 35 per cent to U.S.S.R.

of which areas they exported nearly a million tons of wheat last year. In the last harvest year, the excellent wheat harvest in France and the not too good harvest in eastern Europe produced the unusual result that east-west trade in wheat was of about the same size in both directions (Table 8). With better harvests in eastern Europe, a much better harvest in Turkey and another good harvest in France, the quantities of European grain offered for export will be much larger than last year, while the total import demand of European countries will be considerably lower. For France, however, the long-term trade agreement signed in August of this year provides a guarantee against a reduction in wheat exports to western Germany in the new harvest year, since the quota for wheat, as can be seen from Table 9, is a little above last year's exports of wheat.

While the new trade agreement does not seem to raise French exports of cereals and wines above the level of last year,¹ it provides the basis for more

¹ Exports of coarse grain from French North Africa seem even to be reduced by 40 per cent.

TABLE 9
Western Germany's Imports of Selected Agricultural Products from France

Commodity	New quotas		Actual imports July 1954 — June 1955			
	Quantity	Value	From France ^a	From World	France ^a as percentage of western German imports	Western Germany as percentage of French ^b exports
	Thousands of tons	Millions of DM				
Wheat	500	140	132	901	15	25
Other cereals	400	52 ^c	88	617	14	..
Meat ^d . . . . .	..	54 ^e	24	414	6	11
Wines . . . . .	..	35 ^e	36	100	36	8

Sources: Trade statistics of France and western Germany and *Moniteur officiel du commerce et de l'industrie*, Paris, 18 August 1955.

^a Including other countries in the franc area.

^b Excluding exports from other countries in the franc area.

^c Mainly from French North Africa.

^d Including living animals and animal fats.

^e Two-thirds of the eighteen months' quota.

than doubling French meat exports, though France still remains only a minor supplier of the German import market. Some concern is felt in France about the effects of a further increase in meat exports at a time when a rapid increase in internal demand caused by the increase in real wages is already pushing up meat prices. In the last harvest year French cattle prices increased more than those of other western European countries (see Table 6) and they are now at a higher level than before the break in 1953. The

French authorities are thus confronted with the difficult choice between risking an increase in the important meat item of the cost of living, or refraining from the full utilization of export possibilities which have been difficult to obtain. Whatever may be the outcome as regards the volume of French exports of animal products, the short-term outlook for trade in these products is that of a sellers' market, in sharp contrast to the market situation for cereals.

4. CURRENT DEVELOPMENTS IN THE SOVIET UNION AND EASTERN EUROPE

The two most important economic events in the Soviet Union and eastern Europe in 1955 were the generally favourable harvests and the decisions (except in eastern Germany) to reduce somewhat the size of the armed forces. The improvement in food supplies will reduce the strain on balances of payments in some countries and permit a renewed quickening of the rate of increase in consumption without unfavourable repercussions on the rate of growth of national income. The demobilization, limited though it is (see Table 10), will give Governments a small margin of an everywhere scarce factor of production, which will ease the transition to the next five-year plans now being prepared. It is clear that in the more industrialized countries, particularly Czechoslovakia, efforts will be made to attract the men released into agriculture; in the more agrarian countries, on the other hand, they will help to relieve urban shortages of manpower.

The Output of Agriculture in 1955

Though precise figures are still lacking it is clear that the 1955 harvest was good in eastern Europe and the European part of the Soviet Union.

The only over-all figure on the Soviet grain crop is that bread grain procurement by the State by 1 November was two million tons greater than last year.¹ This result, in the light of favourable reports from some zones of the European part of the Soviet Union and of the increase of 26 million hectares (mostly in Asia and sown to bread grain), suggests that in the Asian part the drought must have severely depressed yields. No official reports have yet appeared on the results of the considerable switch to maize from lower-yielding coarse grains. The cotton and sugar-beet crops are likely to beat previous records.

¹ L. M. Kaganovich, *Izvestia*, 7 November 1955.

TABLE 10
Reductions in Armed Forces
(to be effective by the end of 1955)

Thousands of persons

Country	Size of reduction	Estimated employment in the national economy at mid-1955 ^a	Reductions as percentage of employment in the national economy
Soviet Union . . .	640	48 000	1.3
Albania	9	140	6.4
Bulgaria	18	1 100	1.6
Czechoslovakia . .	34	4 500	0.8
Eastern Germany . .	^b	..	..
Hungary	20	2 500	0.8
Poland	47	6 100	0.8
Rumania	40	2 700	1.5

Source: *For a lasting Peace, for a People's Democracy*, Bucharest, 9 September 1955.

NOTE. — The ratios shown in the third column of this table tend to be higher for the less developed countries (Albania, Bulgaria and Rumania) because the denominator used—the numbers employed in the national economy—excludes members of collective and co-operative farms, as well as private farmers.

^a Employment in industry (including handicrafts), building and construction, retail and wholesale trade, transport and communications, state farms and machine and tractor stations.

^b An increase is planned.

In the case of sugar-beet this was due in part to the extension of the sown area by 180,000 hectares and in part to good weather conditions in the Ukraine, the main producing area. The output of oil-seeds was also well above last year's.

In eastern Europe yields of winter grain were much higher than in 1954 and, though summer grains fared less well, the total grain crop is in general far superior to the previous year's. Poland had higher yields than in any earlier post-war year.¹ Thanks to exceptionally high maize yields, Rumania's grain production was probably materially above pre-war levels for the first time since the war. Hungary and Bulgaria also had higher yields than in 1954.

Significantly, it was in the two most highly industrialized countries of eastern Europe—Czechoslovakia and eastern Germany—that the harvest results were somewhat disappointing after high expectations in

¹ The Polish Minister of Agriculture, Mr. Pszczółkowski, stated (*Trybuna Ludu*, 5 September 1955): "We can already say today that grain yields are this year higher than the yields achieved in the last eleven years, and are, on the average, about 2 quintals higher than those obtained in pre-war Poland." As yields for the four main grains averaged 11.4 quintals (net) per hectare in the years 1934-38, this would seem to imply an increase of about 5 per cent over the average yields of the years 1948-50 (12.7 quintals).

the early summer. Weather played a part here in delaying the grain harvests so long that they coincided with the potato harvests. But it is mainly to the acute shortage of labour, particularly in the still inadequately mechanized socialist sector of agriculture, that the harvesting losses of both grain and potatoes, which were clearly heavy, must be attributed. These were especially great in eastern Germany: whereas the preliminary estimates of winter grain yields pointed to a crop of at least the 1951 peak of 7 million tons (net), the final results are, in fact, somewhat below 5½ million tons. Even this figure is above the average of the two previous years: in the case of potatoes the delays and losses have been much more important, and acute shortages of potatoes for human consumption have been reported in several towns.

TABLE 11
Livestock Numbers

Million head

	Cattle		Pigs
	Total	Of which: Cows	
<i>Soviet Union</i>			
1 July 1954	64.4*	27.0*	..
1 October 1954	64.9	27.5	51.0
1 July 1955 . . . . .	..	28.6*	..
<i>Czechoslovakia</i>			
1 January 1954	3.8	2.2	3.5
1 January 1955	3.8	..	4.0
1 June 1955	^a	^b	4.3
<i>Eastern Germany</i>			
1 July 1954	3.80	2.04	8.00
1 July 1955 . . . . .	..	2.08	8.96
<i>Hungary</i>			
1 March 1954	1.93	0.92	4.45
1 March 1955	1.96	0.90	5.80
1 August 1955 . . . . .	..	..	7.00
<i>Poland</i>			
1 July 1954	7.7	..	9.79
1 July 1955	7.9 ^c	..	10.50

Sources: Plan fulfilment reports, *Szabad Nép*, 9 and 11 June, 9 August 1955; *Rudé Právo*, 1 July 1955 and 3 September 1955; *Nowe Drogi*, No. 7/1955, page 44; *Trybuna Ludu*, 26 July 1955.

^a Less than on 1 January 1955.

^b About 2 per cent less than on 1 June 1954.

^c Provisional.

The same labour difficulties are likely to prevent farmers in Czechoslovakia from gaining the full benefit of the 10 per cent increase in the gross yield of sugar-beet expected; in 1954 losses amounted to one-sixth of the gross yield of 250 quintals per hectare.

Such data as are available on livestock numbers are shown in Table 11. They reveal an increase of about 5 per cent in the number of cows in the Soviet Union between mid-1954 and mid-1955, most of it being concentrated in the Ukraine, where numbers on collective farms rose by 9.5 per cent in the nine months ended in July and by as much as 28 per cent from the beginning of October 1953. Milk yields also increased, and the quantity of milk delivered by collective farms in the Soviet Union as a whole in the ten months October 1954 to July 1955 was 29 per cent greater than in the same months of 1953/54.

In all the countries of eastern Europe pig-breeding has continued to expand, at the expense of increased

TABLE 12

Sown Areas in the Soviet Union and Eastern Europe

Millions of hectares

	1953	1954	1955
Soviet Union			
Sown area	157.2 ^a	166.1	183.1 ^a
of which: Grain	106.7 ^a	112.0	..
Wheat	48.4 ^a	49.3	60.3
Maize	3.5	4.3	17.9
Czechoslovakia			
Sown area	4.87 ^b	4.79 ^b	4.83
of which: Maize . . . . .	..	0.14	0.16
Hungary			
Sown area	5.05	5.40	5.30*
of which: Bread grain	1.75	1.88	1.84
Maize	1.15	1.21	1.30
Sugar beet	0.13	0.12	0.13
Poland			
Sown area	15.08	15.23	16
of which: Grain . . . . .	..	8.8	8.9
Maize . . . . .	..	..	0.1
Sugar beet	0.36	..	0.40
Rumania			
Sown area	9.0	9.3	9.5
of which: All winter grain . . . . .	..	3.1	3.4
Maize	2.9	3.4	3.5
Sugar beet	0.11	0.11	0.15

Sources: Plan fulfilment reports, *Economic Bulletin for Europe*, Vol. 7, No. 2, page 92; *Statistický Obzor*, No. 9, 1954, page 351; *Rudé Právo*, 23 May 1954, 1 July 1955; *Gospodarka Planowa*, No. 4, 1955, page 29; *Nowe Drogi*, No. 2, 1955, page 119; *Selnteia*, 3 March and 28 September 1955; *Pravda*, 3 February, 15 and 22 July 1955; *Ekonomista*, No. 1, 1955, p. 14 and No. 2, p. 37.

^a Directly communicated by the Soviet Government.

^b Directly communicated by the Czechoslovak Government

TABLE 13
Deliveries of Large-scale Farm Machinery in the Soviet Union and Eastern Europe

Thousands

	1954		1955	
	First half	Second half	First half	Fulfilment as percentage of yearly plan
Tractors (equivalent to 15-HP units)				
Soviet Union ^a	92	45	79	..
Bulgaria	1.27	1.45	1.41 ^b	..
Czechoslovakia	6.02	2.88	5.54 ^c	48
Hungary ^d	1.38	3.18	3.00	50
Poland	4.00	4.00	4.80	..
Rumania	1.50	4.10	1.85	..
Tractor ploughs				
Hungary	3.1		2.3	56
Rumania	0.80	2.30	0.84	19
Grain combines				
Soviet Union	18	19	21	..
Bulgaria	0.22	0.32	0.69 ^e	..
Rumania	0.34	0.12	0.55	67
Harvest binders				
Czechoslovakia	2.93	2.88	2.49 ^c	..
Poland	0.73	..	1.11	..
Rumania	0.52	0.79	.. ^f	..
Threshing machines				
Czechoslovakia	1.10		0.51 ^c	..
Hungary . . . . .	..	..	0.55	53
Rumania	0.2	0.70	.. ^g	..
Seed drills				
Rumania	0.62	1.38	0.84	53
Tractor potato planters				
Poland	0.82	..	1.43	..
Tractor potato diggers				
Soviet Union	5	10	9	..
Czechoslovakia ^h	4.51		3.07 ^e	..
Poland	0.51	..	1.04	..
Lorries ⁱ				
Soviet Union	52	64	58	..

Sources: Plan fulfilment reports and *Rudé Právo*, 1 July 1955.

NOTE. — For figures for earlier years and for the first quarter of 1955, see *Economic Bulletin for Europe*, Vol. 6, No. 3, Table 22, page 33; Vol. 7, No. 1, Table 23, page 40; Vol. 7, No. 2, Table 14, page 24.

^a Excluding cultivator-tractors (46,000 in 1954, 31,500 in first half of 1955).

^e Excluding 100 maize harvesting combines and 113 sugar beet combines.

^b Excluding 402 tractors for hay-making.

^f 0.35 in the second quarter of 1955.

^c First five months of the year.

^g 0.24 in the second quarter of 1955.

^d All kinds of tractors.

^h Including beet diggers.

ⁱ Deliveries to agriculture only.

imports of feeding-stuffs in Czechoslovakia and eastern Germany and of increased imports of bread grain in Hungary, where 6 to 7 per cent of the 1954 bread-grain harvest was fed to animals.¹

Though figures are hard to come by, it is clear that the number of cattle in eastern European countries has shown little if any increase. Nor is there any conclusive evidence of increases in slaughter weights. Milk yields, on the other hand, are known to have improved—by as much as 9 per cent in Czechoslovakia and eastern Germany.

The prospects for animal husbandry have now, of course, been greatly improved by the good harvests of 1955.

It would be a mistake to over-emphasize the part played in these generally good results by the weather. Farming has undoubtedly been better and farms better equipped than in the past. The Soviet Union, with its vast increase in the area under cultivation, is a case apart. But, as Table 12 shows, sown areas increased in some countries of eastern Europe too, as land that had been allowed to go to waste was brought back into cultivation.

Parallel with this, the amount of work done by the machine and tractor stations was greatly increased in 1955 in all the countries of eastern Europe except Czechoslovakia: in eastern Germany it was at a rate

over 30 per cent greater than in the first half of 1954; in Poland 25 per cent greater; in Albania 47 per cent and in Rumania 52 per cent. To some extent this was due to better organization, but in the main to the continued expansion of farming capital (see Table 13 for figures of deliveries of machinery), in particular of labour-saving machines (especially row-crop or cultivator tractors and all kinds of harvesting machinery) but also of tools and buildings. Deliveries of artificial fertilizer, too, were higher than in earlier years: as compared with the first half of 1954 they were up by 14 per cent in Poland, by 80 per cent in Rumania (where a new fertilizer plant was commissioned) and by 115 per cent in Albania. In the Soviet Union, fertilizer output increased by 21 per cent.

Though the machine and tractor stations increasingly perform work for individual peasants as well, their main function is to serve the co-operative farms, and the ratio of arable land in the co-operative sector to the number of tractors in MTS gives a rough approximation to the degree of mechanization of the bigger farms, where a fairly high capital-output ratio is essential for efficiency. It will be seen from Table 14 that the degree of mechanization of the co-operatives, measured in this way, which had been greatly reduced during the period of rapid collectivization, has remained fairly constant since 1953, except in Bulgaria and Hungary, where it has increased considerably—in the case of Hungary in large part because of the

¹ See *Társadalmi Szemle*, No. 7-8, 1955, page 2.

TABLE 14
Collectivization and Mechanization of Agriculture in Eastern Europe

	Arable land in co-operative farms (Million hectares)			Number of tractors in the MTS (Thousand 15-HP units)			Arable land in co-operatives per tractor unit (Ha/tractor)		
	End 1950	End 1953	Mid-1955	End 1950	End 1953	Mid-1955	End 1950	End 1953	1954/1955
Bulgaria	2.19	2.51	2.53	10.87	13.47	17.2 *	201	186	147
Czechoslovakia	0.48	1.61	1.59	15.80	19.02 ^a	17.0 ^b	30	68 ^c	..
Eastern Germany ^d	—	0.72	1.01	21.67	46.1	72.24	—	16	14
Hungary	0.39	1.39 ^e	1.0	6.53	8.67	11 ^b	60	160	91
Poland ^d	0.20	1.5	1.8 ^f	5.00	16.4	20	40	91	90
Rumania	0.27	0.97	1.3	6.1	12.5	16	44	78	81

Sources: *Economic Bulletin for Europe*, Vol. 7, No. 2, page 25; *Statistische Praxis*, 1953/8; *Gospodarka Planowa*, No. 7, 1955; *Právník*, Prague, No. 5/1955; *Deutsche Finanzwirtschaft*, No. 17/55, page 708; *For Socialist Agricultural Science*, Series B — Economics, Prague, No. 1, 1955, page 57.

NOTE. — Though the MTS tractors are mainly used on co-operative farms, in all the countries except Bulgaria they also perform work (to an extent varying from country to country, but exceptionally great in eastern Germany) for private farmers.

^a In addition the more developed co-operative farms had 4,560 tractors (15-HP units) of their own.

^b End 1954.

^c This calculation takes into account the tractors owned by co-operatives as well as those on machine and tractor stations.

^d The figures relate to agricultural area of co-operative farms.

^e This figure represents the area at the 1953 peak, before the dissolution of some co-operatives.

^f September 1954.

precipitate winding-up of co-operatives in 1953 and 1954. The most striking feature of the table, however, is the sharp contrast it reveals between eastern Germany and Czechoslovakia.¹ In eastern Germany the degree of mechanization, already far higher than anywhere else in eastern Europe, has risen still further simultaneously with an increase in the area of the co-operative sector. In Czechoslovakia, on the other hand, there has been a fall in the degree of mechanization in the co-operative sector, which even in 1953 was not much greater than in the far less developed Rumania. Altogether, eastern Germany at mid-1955 possessed over 90,000 tractors (in terms of units of 15 H.P.); Czechoslovakia, with similar natural conditions, an agricultural population of about the same size and an even acuter labour shortage, had only 30,700, a large proportion of which were immobilized by breakdown.

Industrial Production

It is for two reasons peculiarly difficult this year to form a view as to the trend of industrial production in the first six months. For two countries, Czechoslovakia and Hungary, no reports on progress in fulfilling the industrial plans of particular industries for the half-year have been published.² Second, the continued lack of even the roughest indications as to the seasonal pattern of output is a particularly serious handicap when a comparison has to be made between two years whose seasonality is known to have been significantly different. Part of the increase in output from the first half of 1954 to the first half of 1955 merely reflects the fact that the weather was much better in 1955—how big this part was and how output so far this year compares with output in the later months of 1954 it is impossible to assess.

Such conclusions as can be drawn from the available statistics and from official commentaries are that fuel and raw material supplies have improved, but are still

holding back the further development of manufacturing. The rate of expansion is nevertheless considerable. In the first half of 1955, as Table 15 shows, gross industrial output in the Soviet Union was 12 per cent greater than in the first half of 1954, compared with a planned increase of 9 per cent: and in May industry was already producing at the rate originally laid down in the fifth five-year plan for the end of 1955. Similarly, the increase for the other countries of eastern Europe was 11 per cent, compared with a planned increase of 8 per cent (see appendix Table I). For the region as a whole, the rate of increase planned for the whole year—9 per cent—is only slightly above that planned for the first half of the year. The implication is that on current rates the annual plans will be over-fulfilled: in anticipation of this, the east German authorities in September increased the year's target.

Appendix Table II suggests that in the reporting periods ending in June 1955 producer goods showed rather more rapid rates of expansion than consumer goods, whereas the converse had been true of the periods ending in June 1954. But it must be borne in mind that the evidence for this conclusion is only partial, and, more particularly, that statistics are generally lacking on branches of industry which are known to have fared less well on the average.

A general feature of the expansion in the capital-goods sector is the substantial increase of the output of agricultural machinery. Appendix Table II and other data not reproduced here show that in every country covered by the Table, as well as Hungary,³ the rate of increase in agricultural machinery or in basic items of farm equipment was several times the average for industry as a whole. As Table 15 indicates, increases in productivity continued to contribute more than new recruitment to the expansion of industrial output.

In the Soviet Union agriculture is for the time being competing with industry for manpower. In the eighteen months that have elapsed since the campaign began to open up virgin lands beyond the Urals, 450,000 workers described as "mainly from the towns and industrial centres"⁴ have joined State farms and MTS in those areas. In addition, 30,000 demobilized servicemen have settled there and 30,000 employees in industry and administration are this year taking over the chairmanship of backward collective farms.⁵

¹ A similar contrast in degree of capitalization is shown by the figures for animal husbandry:

Animal Production in Kg. per Hundred Hectares of Agricultural Land

	Eastern Germany		Czechoslovakia	
	1953	1954	1955 Provisional	1960 Plan
	Actual	Actual	Actual	
Pigs for slaughter . . .	12 320	12 070	7 736	11 350
Cattle for slaughter . . .	4 240	3 830	4 300	5 590
Milk	79 500	87 400	48 200	63 600

Sources: *Neues Deutschland*, 8 June 1955; *Rudé Právo*, 2 and 3 September 1955.

² In the case of Hungary a selective report on the first eight months of the year has just been issued, but this is difficult to interpret because no comparisons with the rates of increase in the corresponding periods of earlier years are possible.

³ No statistics are available for Czechoslovakia. The Hungarian figures, covering eight months, were released too late for inclusion in the Table.

⁴ Talk by the Minister of State Farms to the Moscow diplomatic corps on September 29.

⁵ The actual depletion of the non-agricultural sector will be greater than this figure to the extent that their wives were gainfully employed.

TABLE 15
Indicators of Industrial Activity in the Soviet Union and Eastern Europe in 1955
Index numbers—corresponding period of previous year = 100

Country	Gross output of industry		Employment of workers in industry		Gross output per worker in industry		Cost of production	
	1955 Plan	First half actual	1955 Plan	First half actual	1955 Plan	First half actual	1955 Plan	First half actual
Soviet Union	109	112	102½	105	106½	107	95½	96
Albania	110	117	..	..	..	..	..	..
Bulgaria	107	106 ^a	104	..	103	..	97	95 ^a
Czechoslovakia	109	111	101	103	108	108	96	95
Eastern Germany	105 ^b	112 ^c	100 ^d	102 ^{c d}	107 ^d	109 ^{c d}	96	96
Hungary	106	110	102	103	104	107	97	97 ^e
Poland	109	112	103	105	105	107	97	98
Rumania . . . . .	..	112 ^a	..	..	..	114	..	99 ^f

Sources: Plan texts and plan fulfilment reports, and *Die Wirtschaft*, No. 25/55.

NOTE. — For figures in earlier years, see Table 18, page 27, *Economic Bulletin for Europe*, Vol. 6, No. 3.

^a Second quarter.

^b On 29 September 1955 the target was adjusted to the figure of 106.5.

^c Unweighted arithmetic mean of the increases in the first and second quarters.

^d Workers in nationally owned industry under central control only.

^e First quarter, excluding food industry.

^f First five months (whole year 1954 = 100).

The manpower tightness in industry clearly underlies the reforms proposed by Mr. Bulganin, the Chairman of the Council of Ministers to the Central Committee of the Communist Party of the Soviet Union, in July. He called for, *inter alia*, the production of more efficient equipment (citing unfavourable comparisons with British and American models), the elimination of bottlenecks which led to sub-capacity working, more automation and specialization and a revision of labour norms.

Soviet output of a wide range of producer goods showed rates of expansion above the average for industry as a whole in the first half of 1955—copper, lead and oil among minerals, turbo-generators, bearings, machine-tools, all types of agricultural machinery and locomotives¹ in engineering, cement, fertilizer and pesticides in other sectors. Although consumer durables produced by the engineering industry continued to show rapid rates of expansion, few goods of current consumption—notably hosiery, knitted outerwear and rubber footwear—showed rises above the average for all output. The production of dairy products reflected the marked improvement in milk supplies but meat supplies were below target owing to a failure in pig-raising and to efforts to build

up herds of cattle. Production of cotton fabrics was 7 per cent up on the first half of 1954, but output of other fabrics—linen and silk—was lower and output of woollens was about the same. Among fats, margarine and soap showed no increase, and the production of vegetable oils, hitherto regularly quoted, was omitted from the report.

In Poland, performance in practically all the basic industries was good and the production of machinery and equipment increased particularly fast. Progress in the manufactured consumer goods industries was modest. The report on the first half-year shows that, as a result of intensive efforts, the output of hard coal increased by as much as 6 per cent and of brown coal by 5 per cent. The original target of 100 million tons in the current year is, however, unlikely to be achieved. A similar situation prevails in the case of iron ore. A considerably greater increase than the 18 per cent achieved in the first half of the year would be needed for this relatively new, import-saving industry to attain its 1955 goal of 2.1 million tons. (The original 1955 target was in fact 3 million tons.) At present, imports from the Soviet Union and Scandinavia represent 70 per cent of iron ore requirements. These requirements are themselves rising rapidly as newly created industries such as the motor-car industry (output of which was nearly twice as great as a year earlier), the agricultural machinery industry (with a 50 per cent increase) and other steel-using sectors develop. The need to raise agricultural productivity

¹ The increase was confined to electric and diesel locomotives: the output of steam locomotives was down on the previous year by 14 per cent. This is consistent with the plans announced for raising the proportion of railway traffic electrified to 40 per cent by 1960.

lies behind the substantial increases in output of nitrogenous fertilizers (58 per cent rise) and insecticides (53 per cent).

In Hungary, shortages of fuel and materials were somewhat reduced. Coal output in the first eight months of the year was 5 per cent greater than in the same period of 1954, as against an 8 per cent increase in the output of centrally managed industry as a whole. Electric power generation and steel production showed larger rises, the annual rate of increase in the first eight months of the year being 11 per cent in both cases. Supplies of imported raw materials, moreover, reached the planned levels during the first half of the year.

In eastern Germany total industrial output was above output in the corresponding quarter of 1954 to the same extent in both the first and the second quarters: in the case of the first quarter, however, this represents an under-fulfilment and in the second quarter a substantial over-fulfilment of plan. The increase of 12 per cent was matched by equivalent increases in coal and power output. Iron ore output showed an even greater increase. On the other hand, supply shortages caused bottlenecks in some sections of engineering, and the food industry was held back by low supplies from domestic agriculture not made up by imports. The satisfactory industrial development of the first half of the year led the authorities to raise the 1955 plan targets. At the end of September the goal for the gross output of industry was increased by 360 million DM and the retail trade turnover plan by 600 million DM (this latter mainly a reaction to favourable harvest prospects). The gross output increase now planned of 6.5 per cent in 1955, compares with the plan (as revised in May) of 5.1 per cent.¹

In Rumania several important branches of heavy industry are doing very well. The engineering industries were in August 1955 already producing at the rate laid down in the five-year plan for the end of the year. The volume of output of farm machinery, in particular, in the four years and a half of the plan was more than 40 per cent above the target for the full five years of the plan. Oil production was also running ahead of plan. There was a striking increase (of over 150 per cent) from the first half of 1954 to the first half of 1955 in the relatively small output of manganese ores. On the other hand, coal production, though it was up by 13.5 per cent, will evidently not reach the plan target of 8.5 million tons, and electric power, which is not mentioned at all in the half-year plan fulfilment report, remains a bottleneck. The output

¹ The original target issued in the previous September was for a 10 per cent increase.

of the light industries, on the whole, continued to rise less fast than that of the metal industries.

Personal Consumption

The rise in standards of living, which had been very rapid during 1954, would appear to have flattened out, at least in the towns, in the first half of 1955 in both the Soviet Union and those of the People's Democracies which have published plan fulfilment reports covering the months January to June. (The exception is Czechoslovakia.) Only in eastern Germany were the average earnings of industrial workers appreciably higher than they had been a year earlier. Moreover, whereas in 1954 in some countries average earnings, and in all countries real wages, were allowed to increase faster than productivity, during the current year they have lagged behind.

Not surprisingly, therefore, in the more industrialized countries, increases in the volume of retail sales have been smaller (as Table 16 shows) than a year earlier,² and in some cases such as to leave the absolute level of sales no higher than during the latter part of 1954. No commodity break-down of sales is available (except for the Soviet Union and eastern Germany), but in general it is clear that manufactured

² No figures have been published for Czechoslovakia.

TABLE 16
Index Numbers of Volume of Retail Turnover
in State and Co-operative Trade in Eastern Europe
in the First Half-year

Corresponding period of previous year = 100

Country	Total trade turnover	
	1954	1955
Soviet Union	121	108 ^a
Albania	110 ^b	117 ^b
Bulgaria	129 ^a	.. ^{a c}
Eastern Germany ^d	118 ^a	109 ^a
of which: State trade	103	114 ^a
Hungary	124	104
Poland	118 ^a	112 ^a
Rumania	113 ^b	117 ^e

Sources: Plan fulfilment reports.

NOTE. — For comparison, see Table 19, page 28, *Economic Bulletin for Europe*, Vol. 6, No. 3.

^a Plan was fulfilled or over-fulfilled.

^b Plan was under-fulfilled.

^c Sales in the second quarter of 1955 were 11 per cent above sales a year earlier.

^d Second quarter and including private trade.

^e First five months.

TABLE 17
Investment in Eastern Europe in the First Half-year
Corresponding period of previous year = 100

	Soviet Union		Bulgaria		Eastern Germany		Poland	
	1954	1955	1954	1955 ^a	1954	1955	1954	1955
TOTAL	114	111 ^b	..	105	103	..	109	102
Electric power industry	118	116	108	88 ^b	169	123	..	..
Coal industry	123	115	..	..	..	..	..	..
Engineering	116	104 ^c	..	..	..	..	..	..
Light industry	148	..	..	..	227	112	..	..
Agriculture	153	..	125	..	..	^b	128	148
Cultural purposes . . . . .	..	..	134	111	156	102	148	109

Sources : Plan fulfilment reports.

^a Second quarter.

^b The plan was under-fulfilled.

^c Transport engineering only.

goods, and in particular durable metal goods, have increased faster than supplies of foodstuffs. Rumania and Poland, where sales of some foodstuffs expanded fast (see Appendix Table III), are exceptions to this generalization. Elsewhere, supplies of food were much as earlier, and though the rate of slaughter of livestock was generally high¹ the demand for meat and meat products continued to outrun the supply in Czechoslovakia, Hungary and Poland.

The slowing down of the rise in consumption should not be taken to imply a failure of policy in 1955. On the contrary, it was not unexpected by the planning authorities. Indeed, all the financial policy measures taken in the spring—the decision to increase budgetary surpluses, to limit price reductions mainly to manufactured goods and, in several countries, to dispense with them altogether this year, and the provision of private housing credits—were designed to keep urban demand for consumer goods within stricter bounds. Meanwhile, rural demand was allowed to expand in the interests of the agricultural incentives policy, and sales of durable goods (both consumer goods and equipment) in the countryside continued to increase faster than the average.

Investment

Such extremely scanty figures as have been published on the progress of investment in the Soviet Union and eastern Europe are assembled in Table 17. In almost every case where a comparison is possible, the

rate of increase over the corresponding half of the previous year was lower in 1955 than in 1954. This is somewhat surprising, as it will be recalled that in the early part of 1954 the weather was very bad and adversely affected investment activity whereas in 1955 the weather was consistently good.

In the Soviet Union, according to the Prime Minister, Mr. Bulganin, delays have been caused by a shortage of certain types of machinery. Elsewhere, the main factor limiting the growth of investment appears to have been the shortage of building labour. This has been particularly serious for house-building programmes in some countries. In Czechoslovakia, only 37 per cent of the plan of work for the year was completed in the first six months and only 30 per cent of the houses to be finished this year had been completed. For lack of 8,000 men the average time taken to complete a dwelling is thirteen to fifteen months, as compared with the five to six months which it is claimed should be standard. In Poland the delays are felt mainly in the field of repairs and maintenance on which greater stress is now being laid; during the first half of the year, half of the expanded credits allocated for repairs in 1955 had been taken up, but less than one-third of the work foreseen for the whole year had been carried out.

The Hungarian State housing programme for 1955, it will be seen from Table 18, has been severely cut, as compared even with the achievements of 1954, which was itself well below the plan for the year. Meanwhile, however, the amount of credits to be made available for financing private house-building has been doubled and the number of private building permits issued in 1955 by the end of July was already

¹ In Czechoslovakia the output of pig meat was over 10 per cent greater in the first half of 1955 than it had been a year earlier, but supplies of beef were smaller.

TABLE 18
Housing Construction in some Eastern European Countries

Completions				
	Czechoslovakia (State)	Hungary (State)	Poland (State)	Rumania Total ^a
	Thousand dwellings	Thousand dwellings	Thousand rooms	Thousand m ³
1954 First half . . .	8.0	11.0	160	60
Second half . . .	20.0			330
1955 First half . . .	9.1	..	^b	150
1955 Latest programme for whole year . .	24.5 ^c	5.6	162	468

Sources: Plan fulfilment reports and *Rudé Právo*, 30 August 1955, *Szabad Nép*, 29 June and 9 July 1955, *Statistikai Szemle*, No. 6/1955, pages 561-562.

NOTE. — For a comparison, see Table LII, *Economic Survey of Europe in 1954*, Geneva, 1955, page 260.

^a Excluding most of rural construction.

^b The plan for completing dwellings was under-fulfilled by 7 per cent.

^c The plan for 1955 announced in August 1954 was for 48,000 dwellings.

above the number issued in the whole of 1954.¹ Altogether, private house-building is now more important than the direct State programme.

Foreign Trade

There has been an appreciable increase in the volume of foreign trade of the Soviet Union and eastern Europe in 1955, different in several respects from the increase of 1954. In the first place, in those three countries for which the indices of the total

¹ *Szabad Nép*, 9 July and 19 August 1955 gives the following figures:

	1954 Jan.-Dec.	1955 Jan.-July
Building plots sold by the State (thousands) . . .	23.0	18.5
Building permits issued (thousands)	30	30
Building credits granted (million forints)	180	380

volume of trade are available—Czechoslovakia, eastern Germany and Rumania—it has been trade with the west that has increased the fastest.

Volume of Foreign Trade of Czechoslovakia, eastern Germany and Rumania

(Corresponding period of previous year = 100)

	Total	With the eastern world	With the western world	Intra-German trade
Czechoslovakia				
First half of 1954 . .	108	..	..	—
First half of 1955 . .	116 ^a	111 ^a	145 ^a	—
Eastern Germany				
First half of 1954 . .	139	135	156	300 ^b
First half of 1955 . .	107 ^c	^d	110	114
Rumania				
First half of 1955 . .	137	..	190	—

Sources: *Rudé Právo*, 18 July 1955; *Prague News Letter*, 20 August 1955; *Der Aussenhandel* No. 14, 1955, page 441; *Die Wirtschaft* No. 35, 1955; *Byulleten Inostranoi Kommercheskoi Informatsiy*, Moscow, Nos. 95 and 121/1955; Plan Fulfilment Reports.

^a January-May 1955.

^b Second quarter 1955.

^c Including intra-German trade. (Intra-German trade accounted for 7.6 per cent of eastern Germany's trade with other areas in 1954.)

^d Trade has expanded much less than the average.

Second, partly perhaps because of some improvement in some eastern European countries' terms of trade as a result of rises in the prices of coal, timber and some foods, but mainly because of increases in quantity, eastern Europe's exports to western Europe have this year increased by more than their imports from western Europe: in value terms by almost one-third, as compared with 4 per cent for imports, the comparison in both cases being between the first halves of 1954 and 1955. Rumania's increases of 110 per cent and Hungary's of 80 per cent were particularly notable. In 1954 it had been eastern Europe's exports which lagged behind.

Third, there has been a considerable increase in trade between eastern Germany and Czechoslovakia, on the one hand, and such under-developed countries as Turkey, Egypt, Syria and Indonesia, on the other. Czechoslovakia's trade with overseas under-developed countries, 6.5 per cent of its total foreign trade in 1954, amounted to 9.5 per cent of the total in 1955; of eastern Germany's trade with "capitalist" countries in the first half of 1955 nearly one-quarter was with such under-developed countries.

TABLE I
Gross Output of Industry in Eastern Europe
Corresponding period of previous year = 100

Country	1954					1955		
	First half	First half	Whole year			First half	First half	Whole year
	Plan	Actual	Plan announced at beginning of the year	Plan as revised during the year	Actual	Plan	Actual	Plan announced at beginning of the year
Albania	112	110	113	114	111	113	117	110
Bulgaria	109	107	108	107	109	102 ^a	106 ^a	107
Czechoslovakia . . .	102	103 ½	106	102	104	108	111	109
Eastern Germany . .	113 ½	112	113	110	110	109 *	112	107 ^b
Hungary	101 *	102 *	104	102	103	105	110	106
Poland	111	114	111	109	111	109	112	109
Rumania	100 *	100 *	108	106	107	103 ^a	112 ^a	108 *
TOTAL . . .	108	109	110	107	108	108	111	108

Sources: Plan texts and plan fulfilment reports.

NOTE. — The weights used in deriving the total index were estimates of employment of manual workers in industry in 1953. *Mezhdunarodnaya zhizn*, Moscow, No. 7/1955, page 56, published an index of gross industrial production in the people's democracies as a whole (that is in the countries in the table other than eastern Germany) which is very similar to the aggregate

index shown in this table and identical with the index published in an earlier number of this BULLETIN (Vol. 5, No. 2, page 4, and Table I, page 84) and obtained by applying the volume indices of gross output for 1951 (1938 = 100) to 1938 weights proportional to net output.

^a Second quarter.

^b Revised plan announced in September 1955.

TABLE II
Index Numbers of Industrial Production in Eastern Europe

Corresponding period of previous year = 100
A = Second quarter; B = First half

	SOVIET UNION		ALBANIA		BULGARIA		EASTERN GERMANY		POLAND		RUMANIA	
	1954 B	1955 B	1954 B	1955 B	1954 B	1955 A	1954 A	1955 A	1954 B	1955 B	1954 B	1955 A
Basic industry												
Hard coal	108 ^a	112 ^b	154 ^a	120 ^b	b	113 ^a	107	a	101 ^b	106 ^a	b	114
Brown coal	110 ^a	119 ^a	128	112 ^a	a	113 ^a	107	111 ^a	113	105 ^a	b	109 ^a
Coke	111 ^a	112 ^a	129	127 ^a	102 ^b	118 ^a	107	112	113 ^a	117 ^a	..	a
Crude oil	111 ^a	112 ^a	129	127 ^a	102 ^b	118 ^a	107	112	113 ^a	117 ^a	..	a
Electric power	111 ^a	112 ^a	129	127 ^a	102 ^b	118 ^a	107	112	113 ^a	117 ^a	..	a
Iron ores	106 ^b	112 ^a	—	—	114 ^a	134	a	111 ^a	123 ^a	118 ^a	..	a
Pig iron	109	110 ^a	—	—	b	119 ^a	..	105 ^a	112 ^a	111 ^a	..	114
Crude steel	109 ^a	111 ^a	—	—	..	263	111	114	107 ^a	109 ^a	..	b
Rolled products	109 ^a	111 ^a	—	—	..	263	111	114	107 ^a	109 ^a	..	b
Engineering												
Agricultural machinery	b	..	..	..	..	b	151	156 ^b	161	150 ^a	b	..
Tractors	119	127 ^a	—	—	125	..	..	..	111 ^a	105 ^a	..	..
Cultivators	101	115 ^a	128	134	..	..	..	..	118	..	a	..
Chemicals												
Sulphuric acid . . . . .	..	b	—	—	109 ^a	104 ^a	131 ^a	112	113 ^b	109	b	126 ^a
Caustic soda	111 ^a	112 ^b	—	—	..	..	..	..	106 ^b	116 ^b	b	141 ^b
Phosphate fertilizers	111 ^a	121 ^a	—	—	..	..	115	b	110	109 ^a	a	145 ^a
Nitrogenous fertilizers	111 ^a	121 ^a	—	—	105 ^a	124 ^a	112 ^a	a	110	158 ^a	..	145 ^a
Building materials												
Cement	115 ^a	122 ^b	107	165	..	109 ^b	112 ^a	108	107 ^b	107 ^b	b	128
Bricks	113	113 ^b	..	..	109 ^d	105 ^b	104	..	114 ^b	105 ^b	b	129 ^b
Consumer goods												
Cotton fabrics	103 ^a	107 ^a	107	133	b	a	a	105 ^e	110 ^a	105 ^a	..	114 ^a
Woollen fabrics	119 ^a	102 ^a	..	237	b	a	a	105 ^e	103 ^b	107 ^a	a	108 ^a
Silk fabrics	157 ^a	98 ^b	..	..	b	a	..	104	110 ^a	108 ^a	a	131 ^a
Leather footwear	110	104 ^a	..	185	a	105 ^a	125 ^a	a	115 ^b	109 ^a	b	113 ^a
Paper	109 ^a	104 ^b	—	—	102 ^a	125 ^a	..	..	104 ^b	106 ^b	a	105
Furniture	128	118 ^b	..	..	..	..	120	..	133 ^a	a	b	123 ^b
Refrigerators	316	131	—	—	..	..	242	b	..	..	..	..
Sewing machines	125	125 ^a	—	—	..	..	188	b	205 ^a	a	..	a
Foodstuffs												
Macaroni products	116	115 ^a	123	..	..	a	..	..	151	a	..	..
Sweets	105 ^a	..	..	..	118 ^a	a	..	..	176 ^a	116	a	124 ^a
Chocolates	102 ^b	bg	..	..	116 ^a	126	104 ^f	113 ^f	99 ^{bg}	99 ^{bg}	a	136 ^a
Meat products	116 ⁱ	100 ⁱ	..	..	148 ^h	..	a	133	136	..	..	..
Edible fats	117	..	118	..	127 ^a	a	121 ^a	..	121	107	..	..
Vegetable oils . . . . .	..	a	..	..	..	..	..	111	106	108 ^a	b	110 ^b
Milk . . . . .	..	115 ^a	..	..	..	124 ^a	a	..	103 ^b	114 ^a	b	152 ^b
Butter	105	123 ^a	..	..	..	106 ^b	134 ^a	134	..	a	b	125 ^a
Cheese	113	a	121	117	129	..	126	..	107 ^a	96	a	a
Beer	113	a	121	117	129	..	126	..	107 ^a	96	a	a

Sources: Plan texts and Plan fulfilment reports.

NOTE. — Czechoslovakia did not release any figures of industrial output by commodities in the first half of 1955. In Hungary no percentages of increases were released in the Plan fulfilment reports in the first halves of 1954 and 1955. For a comparison see Table XXXIII, *Economic Bulletin for Europe*, Vol. 6, No. 3, page 70.

a Plan fulfilled or over-fulfilled.

b Plan under-fulfilled.

c Coking coal.

d Bricks and tiles.

e All kinds of cloth.

f Meat and meat products.

g Meat only.

h Lard.

i Margarine only.

TABLE III
Index Numbers of Volume of Retail Sales in State and Co-operative Trade in Eastern Europe
in the First Half-year

Corresponding period of previous year = 100

	SOVIET UNION		ALBANIA		BULGARIA		EASTERN GERMANY		HUNGARY		POLAND		RUMANIA	
	1954	1955	1954	1955	1954	1955 ^a	1954 ^{ab}	1955 ^{ab}	1954	1955	1954	1955	1954	1955 ^a
TOTAL	121	108	110 ^c	117 ^c	129	111	118	109	124	104	118	112	113 ^c	117 ^d
<i>Foodstuffs</i> . . . . .	..	..	..	..	..	..	111	103	97	..	..	..	116	..
Bread . . . . .	..	..	106 ^e	104 ^e	..	..	..	..	..	122 ^f	106	106	109	120 ^f
Sugar	114	..	163	127	211	115	..	..	107 ^g	108	122	116	..	123
Sugar products	114	105 ^h	..	..	121	114 ^h	..	..	149	108	..	133 ^h	111	114
Meat	130	106	120	140	114	122	129	..	^c	^c	102	^c	^c	134
Meat products	130	..	..	113	121	..	..	..	..	..	..	..	108	119
Fish and fish products	124	120	..	..	..	..	152	114	..	..	149	..	..	179
Fats	113	115	112	118	118 ⁱ	..	136	111	..	..	104 ⁱ	^c	..	116 ⁱ
Vegetable oil . . . . .	..	..	..	..	..	114	..	..	..	..	..	112	154	..
Milk	121	112 ^j	121	..	..	127	..	..	..	105	105	109	..	162
Butter	128	..	..	..	..	131	111	..	136	106	120	130	..	118
Cheese . . . . .	..	107	160	137	118	..	..	..	..	138	..	..	^c	178
Eggs . . . . .	..	113	295	..	..	..	..	104	132 ^a	..	104	115	..	200
Tea	119	..	..	..	..	..	..	..	..	..	134	117	..	..
Fruits	147	..	194 ^k	..	..	..	..	..	..	..	300	..	^c	..
<i>Industrial goods</i> . . . . .	..	..	..	..	..	..	129	109	149	..	..	..	111	..
Textile fabrics	124 ^l	118 ^l	..	..	..	..	..	..	..	^m	119	116	..	..
Cotton cloth	119	110	144	102	166	..	274	..	122	..	106	114	110	..
Woollen cloth	156	..	330	153	147	118	..	..	156	..	..	125	106	..
Silk cloth	145	110	..	..	110	..	115	..	..	..	112	121	..	..
Footwear	115	106	94	150	124	128	132	110	..	..	113	117	^c	121

Sources: Plan fulfilment reports.

NOTE. — For a comparison, see Table XXXIV, page 71, *Economic Bulletin for Europe*, Vol. 6, No. 3.

^a Second quarter.

^b Including private trade.

^c Plan under-fulfilled.

^d First five months.

^e Macaroni products.

^f Flour.

^g First quarter.

^h Confectionery.

ⁱ Lard only.

^j Including other dairy products.

^k Preserved.

^l Clothing.

^m Clothing: below 100 in second quarter.

SHORT-TERM BUSINESS INDICATORS IN WESTERN EUROPE

This article is highly selective. A survey of the data which are capable of being usefully applied to short-term business forecasting would cover the whole field of economic statistics. In fact, a large part of the article (Section 5) is devoted to the recent development in western Europe of the *Konjunkturtest* method, by which a sample of business men are called upon to make returns merely of directions of change and not of absolute quantities. Partly in order to provide a setting for the study of the *Konjunkturtest* method, designed as it is to provide information which, though imprecise, is more up to date and more comprehensive than that available from conventional statistical sources, earlier sections of the article are devoted to certain specific classes of statistical data. These have been selected both because of their special importance for identifying short-term movements and because their scope varies widely from one western European country to another and generally appears to be inadequate in all of them. The classes of statistical data which have been selected in this way for short review are those relating to stocks (Section 1), orders (Section 2), and certain types of building statistics (Section 3), and a review is included (Section 4) of surveys of investment intentions.

The use of current economic statistics in forecasting economic activity is obviously a subject for a whole volume rather than an article. It is probably sufficient to point out that usefulness in forecasting ought to be one of the criteria in future development of statistics, and that it is as well to remember that the selection of statistics collected is at no stage final.¹ The emphasis in this article is on statistical data which are essentially "forward-looking" — that is, data which are factual in the present, but which in their implications are more concerned with the future than with the present. Some groups of statistics falling into this class have not been discussed because discussion of their characteristics is fairly familiar ground. Commodity prices

are an obvious example. Others have been omitted because they are more uniform in concept and more generally available. For example, among data on employment the number of vacancies registered by employers with labour offices is obviously a good indicator of the state of demand in the labour market, and this is available in most countries of western Europe,² although in some countries the figures need to be handled with caution.³

Certain financial statistics are also by their nature highly "forward-looking". A simple index of industrial ordinary share prices is published in almost all countries of western Europe, though not all have achieved equal success in solving the particularly delicate index number problem involved. An index of prices or yields of government securities is also usually available. In France, western Germany, Italy, the Netherlands, Sweden and the United Kingdom the average dividend yield on a selected group of ordinary shares is published at frequent intervals.⁴

Earlier attempts at forecasting, particularly in the United States, France and the United Kingdom in the years up to 1930, were partly based on the use of "barometer" series,⁵ whose movements were expected to herald changes in over-all activity. This method, which was not strikingly successful at that time, has

² The number of vacancies registered during the month has sometimes to be computed from the series giving the stock of vacancies and the number of vacancies filled, the latter being given presumably because it represents the "success" of the labour offices in placing unemployed workers.

³ In the United States another series dealing with employment is found to be of great utility, namely figures of the number of man-hours worked in industry. This is not available in several countries of western Europe, and in some others only at infrequent intervals.

⁴ The comparison of the dividend yield on ordinary shares with the return on government securities is of importance. In the particular case of the United Kingdom this ratio is available in the form of a "confidence index". Two different versions are published: one is issued weekly to subscribers by Moodys Services Ltd.; the other appears monthly in the *Investors' Chronicle* (for details see *Investors' Chronicle*, 15 November 1952).

A useful account of the financial statistics available for the United Kingdom is contained in "Statistics Bearing on Financial Investment" by J. I. Mason and D. Sachs, *Journal of the Royal Statistical Society, Series A (General)*, Part I, 1955.

⁵ Among others, commodity price indices, interest rates, money supply, and volume of coal consumption.

¹ In an article in *Ekonomisk Tidskrift*, No. 1, 1945, entitled "Den ekonomiska statistikens utveckling" (The development of economic statistics), Professor J. Åkerman pointed out: "At the present time, the usefulness of the statistics of industrial production would hardly be denied by anybody. But only ten years ago the construction of a monthly index of industrial production was still regarded with a certain suspicion...".

recently been shown to be of limited usefulness in a comprehensive study by the United States National Bureau of Economic Research.¹ It appears that there is no possibility of predicting major turning-points by these methods but that their objective use "will at least reduce the usual lag in recognizing revivals or recessions that have already begun". In an analysis of 801 series, it was found that 75 normally lead at peaks and troughs but that none was completely reliable as a forerunner of major changes. The conclusion is in favour of intelligent appraisal of a large number of series "having useful indicator characteristics".²

The implication is that the search for an unique advance indicator of turning-points in the business cycle is as fruitless as the search for a statistical series which will uniquely represent the business cycle,

¹ Geoffrey H. Moore, *Statistical Indicators of Cyclical Recessions and Revivals*, Occasional Paper No. 31, N.B.E.R.

² A similar conclusion is reached in a recent Belgian article. See *Bulletin Mensuel de Conjoncture*, Institut de Recherches Economiques et Sociales de l'Université de Louvain, July 1955.

although efforts are still being made to find a "combined" index to take the place of the barometers—the latest and most refined of these being the "diffusion" index developed in the United States by the National Industrial Conference Board.³

The countries which are mainly considered in this article are Austria, Belgium, Denmark, Finland, France, western Germany, Greece, Italy, the Netherlands, Norway, Sweden, Switzerland, Turkey and the United Kingdom. Appendix X gives a summary and not necessarily comprehensive statement of sources, which also covers some data not specifically mentioned in the text.

The sections which follow on statistics relating to stocks and orders are confined to the regular statistics of the conventional type. It will be seen in Section 5 that by the use of the *Konjunkturtest* method more up-to-date indications, which are also often more comprehensive, are obtainable on what is essentially a qualitative basis.

³ For details see *Business Record*, N.I.C.B., June 1954.

1. STATISTICS OF STOCKS

Perhaps the most serious difficulty in analysing economic change, especially on a short-term basis, whether by way of prediction, or even—after the event—by way of explanation, arises from the inadequacy of data about stocks and work in progress. The case for improvement needs no elaboration. It rests also on the importance for a smoother working of the economic machine that manufacturers and traders should have better knowledge of stock movements.⁴ Fluctuations in economic activity could thus be moderated.⁵

In the brief review which follows of *published* figures for stocks, primary agricultural products are omitted, although of course they, like stocks of raw materials in general, are of vital importance for appreciation of

the balance of payments of a country. Neither is account taken of figures published only annually, which may be of great importance in social accounting but not in short-term forecasting,⁶ nor is mention made of special enquiries undertaken at irregular intervals. No short-term data for work in progress are published in western Europe. A useful sample of information available about stocks for most of the countries concerned is presented earlier in this BULLETIN in Table 5 of the article "Current Economic Developments in Europe".

Stock statistics are presented in two different ways. Figures may be supplied for individual commodities in terms of actual physical quantities. Or they can cover a group of commodities or a sector of industry or trade, with the over-all total for each grouping, the measurement being in terms of value or, with the help of index numbers, of volume. When stock data are given in absolute values it will, of course, be necessary to consider the intricate problem of price variations before any meaningful conclusions can be drawn.

Five countries can be dismissed out of hand—Austria, Greece, Sweden, Switzerland and Turkey—on the grounds that next to no figures are published

⁴ This is sometimes used as an argument for the collection by trade associations of figures for stocks which are released only to their own members and not published. The arguments against publication of statistics of stocks, including those which may sometimes be advanced on national grounds, cannot be dismissed out of hand. But what is here important is that business men at one stage of manufacture or trade should know what is happening, not only at the same stage, but also at a different stage, which is usually covered by a trade association other than their own.

⁵ See *Economic Survey of Europe in 1954*, page 26. Footnote 1 refers to two articles illustrating the point—H. A. Turner and R. Smith, "The Slump in the Cotton Industry, 1952", *Bulletin of the Oxford University Institute of Statistics*, 1953, No. 4, and A. M. Alfred and R. E. Utiger, "Stock changes as a factor in demand", *Accounting Research*, October 1954.

⁶ It is the short-term movements that are of interest, even though it may not always be possible to reconcile the monthly values, for example, with an annual evaluation of stock changes

for them. Among the remaining nine western European countries, Denmark occupies a peculiar place. While its stock statistics cover a very wide range of commodities, they are collected and published only twice a year, for the end of June and the end of December, and therefore at most times of year they are even more out of date than such statistics normally are. Then there is a group of countries—Belgium, Finland, western Germany, Italy and the Netherlands—for which the published figures are sparse and unsatisfactory. For some countries in this group figures are published for coal and coke and for steel. In Belgium and the Netherlands figures are published for a few other individual commodities, such as margarine, tar and benzole, and textiles in Belgium, and bricks, leather and textiles in the Netherlands. In Italy there is some published information about individual textile commodities. Here, however, the main stock data take the form of unofficial monthly index numbers for the volumes of stocks of finished products held in the following sectors: mining, metal-making, chemicals and textiles.¹ In western Germany, although the stock data available for coal and coke and for steel are very detailed, the only other stock statistics available are, as in Italy, from an unofficial source. They are confined to indicating the volume of retailers' stocks both in total and for the following categories: food, drink and tobacco; textiles and clothing; consumer goods; household goods; and others.² In Finland the only series in question relates to the volume of retailers' stocks in co-operative stores.

This leaves France, Norway and the United Kingdom. In all three countries figures are published for a large number of individual commodities, monthly series being available for France and the United Kingdom, and quarterly series for Norway.³ In the case of Norway the quarterly commodity figures are published only at six-monthly intervals, but they are also aggregated and index numbers indicating volume are published quarterly for groups—an interesting feature being the three series distinguishing between manufacturers' stocks of raw materials, manufacturers' stocks of finished products and wholesalers' stocks. The only published data for the United Kingdom covering wider groups are figures for stocks of textiles and clothing held by wholesalers and also by retailers, although a quarterly index of the total value of manufacturers' stocks (covering stocks of raw mate-

rials and fuel, work in progress, and stocks of finished products) is now to be published.

It is known that in many countries information about stocks is collected by government and other agencies but remains unpublished. In western Germany, for example, monthly series which are not published are collected by the government Statistical Office for stocks, measured in quantities, of textile semi-manufactures and finished goods, leather, and chemical fertilizers. In the United Kingdom too, the Board of Trade collects, for each quarter, information concerning the value of stocks of materials and fuel, work in progress and finished goods from a sample of large firms in several industrial sectors within manufacturing. In all countries there are various reasons why such information is withheld or is made available only to the particular business interests concerned. Sometimes it is so defective that it is thought apt to mislead those who are not sufficiently aware of the defects. Sometimes publication is eventually intended but an interim period for experiment is desirable. Sometimes business men who supply it may be unwilling to do so if it is going to be published. And sometimes it may be thought to be contrary to the interests of the particular group concerned, or of the economy as a whole that publication should take place.

It is often a defect in stock statistics that the stocks held at different stages of industry are not distinguished⁴ and that frequently retail and often also wholesale stocks are omitted altogether. The commodity figures published for France relate purely to stocks held in industry; those for Norway include wholesale stocks; while in the case of the United Kingdom it is usually stated for each individual commodity to what extent, if any, the figure includes stocks held by the producing or consuming industry, or outside manufacturing.

Like many other economic time series, figures of stocks are often subject to seasonal variation, and the question of the significance of an increase or a decrease is then difficult to deal with. The extent of the difficulty varies a great deal between one case and another. There are many cases in which seasonal variation is not significant. Often it is important but the seasonal pattern is not clearly defined and is masked by other

¹ For further details, in particular of the method and coverage, see Professor F. di Fenizio, *Due scritti attorno agli 'indici delle scorte' in Italia*, Milan 1953.

² Published by the Munich IFO-Institut für Wirtschaftsforschung in *Schnelldienst*, the basic information being supplied by the Institut für Handelsforschung of Cologne University.

³ In a few cases on a monthly basis.

⁴ In the case of semi-finished products stocks held by using industries are often omitted altogether. For France and the United Kingdom they are occasionally given. For example, in both countries stocks of wood pulp held by the paper-making industry are published, and again, in France stocks of textile yarns in weaving mills are available. But information about consumers' stocks of finished steel, which is vital for any clear definition of the steel position, is not available for any western European country except the United Kingdom—and then only twice a year—(a matter which is at present under consideration by the Steel Committee of the Economic Commission for Europe).

factors. Part of the trouble is that there is a double seasonal factor: the normal relationship between stocks and output or sales may be subject to seasonal variation as well as the output or sales themselves. The main trouble is, however, that, far more than any other factor depicting economic conditions, stocks are usually subject in large measure to random and cyclical fluctuations.¹ In any case it would require a course of several reasonably steady years before the seasonal variation in stock figures could be eliminated by conventional methods in a manner which would invite confidence.² For similar reasons the somewhat crude artifice of comparing the figure for one point of time with that for the same date in the previous year may often be misleading.

A feature which detracts considerably from the value of such stock data as are published in western European countries is the delay with which they are released. This delay may vary, for figures published on a quarterly or monthly basis, from six weeks to six months. This is demonstrated in Appendix VII, which shows for a selected group³ of semi-manu-

factured and manufactured goods the information which was available at 15 October 1955.

It is evident that the delays are such as to militate against current analysis of the type often conducted in the United States, where analysts are able to draw upon a vast fund of information on stock movements at all stages in the economy, little of which is more than six weeks out of date.⁴

Clearly there is much progress still to be made. Although in western Europe the United Kingdom is one of the countries least badly equipped with particulars of short-term stock movements, it was thought necessary recently to make the following official appeal: "It is necessary to have early knowledge about all stock trends if action is to be taken by the Government and by business itself to anticipate, or mitigate, excessive stock movements and so avoid disturbances to the balance of the economy both internally and externally. At present the information is not sufficiently up-to-date or complete to be an adequate guide. Industry and commerce, as well as the Government, stand to profit from fuller current intelligence."⁵

¹ Mr. Charles E. Young suggests that "seasonal adjustment of the data by statistical means may solve or reduce" the problem presented by strong seasonal swings in sales, but the problem caused by the development from time to time of conditions of extreme shortage or surplus "is a continual challenge to the wit and insight of the individual observer" (see "New businesses, business failures and inventories", *Determining the Business Outlook*, edited by H. V. Prochnow, New York, 1954, page 375). In the presentation by the Board of Trade of the United Kingdom of the series for wholesale trade in textiles it is interesting to note that the seasonal pattern, based upon pre-war movements, is given, but that no attempt is made to correct the published series, this step being left to the discretion of the analyst.

² With particular reference to the methods of moving averages and of link relatives most authors suggest a period of at least five to ten years.

³ An attempt has been made to draw up a short list of semi-

manufactured and manufactured products which, on the basis of information currently available, best represents the main industries or industrial sectors. These products are in no way suggested as forming an ideal list.

⁴ For the three distinct stages, manufacturing, wholesale and retail, monthly aggregate stock data measured in value are published in the *Survey of Current Business* and its weekly supplement *Business Statistics*, within six weeks of the end of the month in question. This information distinguishes throughout between durable and non-durable goods with even more detailed breakdowns for manufacturers' and retailers' stocks. Commodity stock statistics, in physical quantities, cover a wide range of products and the information is generally available within six weeks to two months of the end of the month considered, although in many cases data can be obtained earlier from the primary sources.

⁵ *Bulletin for Industry*, H.M. Treasury, June 1955.

2. STATISTICS OF ORDERS

Up-to-date information about orders can also make a notable contribution to the success of short-term forecasting. It takes two forms: information about the stock of outstanding orders, often called the order book, and information about incoming or new orders.

There are a number of statistical difficulties of interpretation. It is almost invariably left extremely vague to what extent an "order" really represents a contract. It would be helpful also if it were indicated how cancellations of orders are dealt with. The natural procedure is to deduct them from the new orders, so that the published figure for incoming orders is the net difference. This question becomes particularly acute

at or after times of severe shortage, when a purchaser is apt to place duplicate orders with different suppliers in the hope of getting delivery from one of them without too much delay. Whatever procedure is adopted for dealing with cancellations, nothing can be devised to avoid the misleading effect on the statistics of such duplication of orders.

Another difficulty is caused by price changes. The natural relationship between new orders, deliveries, and changes in the order book is then upset if the information is presented in terms of volume—also if it is presented in terms of value when a price-variation clause is in operation.

There is also the difficulty caused by heterogeneity. The categories which are covered by individual figures normally comprise a wide range of products and within that range there is often a marked variation in the length of order books.

Finally, there is the same problem of seasonal variation as arises over stocks; and the difficulties of dealing with it take similar form. It is necessary to distinguish the case in which a seasonal variation in output is the direct effect of a seasonal variation in new orders, as with fashion goods, from the case in which the seasonal variations in both are the effects of a common cause, such as holidays. In the former case the seasonal variation in the new orders does not have to be, and should not be, eliminated, so long as the object of the forecaster is simply to predict the course of trade from month to month without trying to express a view as to how trading conditions compare with those of earlier years.

The question now arises whether it is the total size of the order book or the rate of influx of new orders which is the more significant. If the order book is small in relation to output, it is subject to rather arbitrary fluctuations in size and it is the rate of influx of new orders which is the dominant force and which, by the introduction of a time-lag, can be correlated with output. If, on the other hand, the order book is large, both the size of the order book itself and the flow of new orders are important and ideally both sets of information are needed (though, in fact, they are rarely both available). The flow of new orders indicates the prospect of a change in trade conditions; the size of the order book provides some idea of the period of time over which output might be maintained despite a decline in trade conditions. A typical instance is that of a commodity which it takes a long time to produce, and probably is also durable. However, orders will accumulate on manufacturers' books for most commodities at times when demand has outrun productive capacity. The correlation of output neither with new orders nor with the size of the order book is likely to be at all precise. New orders may fall off simply because delivery dates have become too distant; output may be reduced when new orders fall off despite the existence of a larger order book, in order to postpone the possible need for an even more drastic reduction; and when times are bad orders are apt to be ruthlessly cancelled.

In theory, it is possible from a knowledge of deliveries to convert new orders into changes in the size of the order book and *vice versa*. This is possible, however, only if the information is provided in absolute terms rather than in the form of index numbers. Even so, in practice differences between actual and

derived results may occur;¹ often, for example, there is a serious difference of coverage between the figures for orders and the figures for deliveries.

Appendix VIII indicates the information about orders which is published monthly or quarterly² in western European countries. It will be seen that such statistics are available in only seven countries.³ Apart from these countries, in Austria monthly figures are published, but only annually, for the volume of incoming and outstanding orders held by steel mills, and in Finland, also only annually, quarterly index numbers are published of the value of incoming and outstanding orders in the engineering industry. At rare intervals information about the volume of outstanding orders in certain Swiss industries, notably those producing machinery and electric equipment, is published. Finally, it is understood that in Denmark a quarterly enquiry is being started about orders for the metal-using industries. Much of the information available, particularly that for the metal-using industries, is embodied in a table which appeared in a recent number of the BULLETIN.⁴

The presentation of the data on orders varies from country to country. It is rare that production, deliveries, stocks, incoming and outstanding orders can be easily compared. Only in western Germany, where the information published on orders is already considerable (unlike the information about stocks), are comparable series shown for incoming orders, production and deliveries.⁵

The High Authority of the European Coal and Steel Community publish monthly index numbers for the volume of new orders, and of the stock of orders, aggregated for the steel industries of the member countries.

For the shipbuilding industries in the principal countries of the world, the Shipbuilders' Council of

¹ Figures in the British press (e.g., *The Financial Times*, 7 September 1955) showing the value of new orders for and deliveries of metal-working machine-tools appear to indicate an increase in the stock of orders from the end of December 1954 to the end of May 1955 of £11 million. Actually, however, the value of the stock of orders reported in the *Monthly Digest of Statistics* had increased only by £8.8 million over the same period.

² For Sweden the information is collected and published twice a year.

³ In the case of France such information as is published is scattered and not readily accessible. Information is also published for the west Berlin industry and the iron and steel industry of the Saar.

⁴ *Economic Bulletin for Europe*, Vol. 7, No. 1, page 5.

⁵ However, all the series are expressed in index number form and no indication is given of their absolute relationship during the base period. Also, care should be taken when interpreting the major group index numbers; for example, the group for investment-goods industries also covers industries producing durable consumer goods which are often difficult to isolate.

America collect information about the gross tonnage of new construction of merchant shipping in hand or on order. The results by country (twelve western European countries are specified) and by three major categories of vessel are published for each quarter in the *Bulletin* of the American Bureau of Shipping with a delay of approximately two months.

As with stocks, the figures for orders in western European countries are usually published too late to be of much service for short-term forecasting. The position was stated as follows in a recent BULLETIN "... the most recent information at the time of writing [July 1955] ranged from December 1954 for the Netherlands to March 1955 for Belgium and western Germany. This means that statistics of orders are considerably more out-of-date than statistics of industrial production, for which most countries had already published figures for April and some for May."¹

¹ *Economic Bulletin for Europe*, Vol. 7, No. 2, page 5; see also Chart 1 on page 6.

3. BUILDING STATISTICS

The two kinds of data concerning building activity which can be considered as "forward-looking" are those dealing with starts and with authorizations.³ Data for buildings under construction can be useful, but they tend to be imprecise in their implications,⁴ (less so if, as in the Netherlands, an approximate idea of the stage of construction which has been reached is given at the same time).

Starts are the most important form of building statistics for forecasting purposes, since, apart from giving a good indication of the volume of activity to be expected, they also are precise in timing. But Appendix IX shows that figures on starts are available in relatively few countries and in many cases, particularly for industrial building, it is necessary to fall back on figures for authorizations, which in fact for Greece and Turkey are the only quantitative building figures published more frequently than once a year.⁵

³ Considerable detail on the number and value of contracts awarded (and the corresponding floor area) is available in the United States for 37 of the 48 States (published in the *Survey of Current Business*). However, such information is not available in western Europe: in the United Kingdom there was at one time published a series on "new contracts" for residential construction, but this has been discontinued.

⁴ Except for the particular question of house completions within the next average building period.

⁵ Until 1954 Belgium belonged to this category. In Austria no building figures at all are published, except annually.

One obstacle to a more generous presentation of information about orders is the feeling sometimes held in trade associations, which are often much concerned with collecting such figures, that up-to-date publication may be harmful to the interests of their members. Such an obstacle has not been allowed to impede the flow of information about orders in the United States.²

² Monthly estimates, in terms of absolute values, of manufacturers' net new orders and the stock of orders are published with a delay of approximately six weeks in the *Survey of Current Business* and its weekly supplement *Business Statistics*. These aggregate data distinguish between new orders and unfilled orders in total durable and non-durable goods industries, with a further breakdown of the durable goods industries in each case. Statistics for new orders and occasionally unfilled orders are also available for several commodities, although the delay of publication may extend up to two months. Comparisons with aggregate stock, sales and production data are considerably simplified by the fact that the same classification is used throughout and, although the samples may be more or less representative according to the statistics, all figures are "blown up" to a national basis.

The word "authorization" is deliberately used here in a loose sense. In fact it covers a very wide range of meanings. In most countries the building control of the post-war period has been abandoned or is in abeyance. The published figures relate to the permits which are called for under regulations concerned merely with the maintenance of proper standards of construction, hygiene and town planning. There is usually no difficulty in obtaining the permit if certain minimum conditions are satisfied.

The use of a licensing system for the purpose of restricting building operations, with an eye to what the country can physically afford, still operates only in Norway, Sweden, and, apart from dwellings, in the Netherlands.⁶ This should mean that the resulting figures for authorizations⁷ reflect more closely actual preparations for building, since if there is serious doubt

⁶ The control of building in the Netherlands has again been intensified since 1 August 1955. For the previous three years industrial building in particular had not been subject to control. In Sweden construction of one- and two-family houses was released from control at the beginning of 1954, but these form a relatively small part of total residential construction. In Denmark control of construction other than residential and industrial building is still exercised by licensing of materials. A check on residential building is at present exercised in several countries by financial means.

⁷ In the Netherlands, however, it is in fact the municipal figures for permits under the building regulations which are used in the statistics.

whether a licence will be available, final preparation will not be made until after it has been issued. In these same countries the period of validity of the licence is fairly short. In the Netherlands and, effectively, in Norway it is about six months. From inspection of the figures for recent years it does appear that in the Netherlands an increase in authorizations from quarter to quarter provides a reasonably good indicator of a later rise in completions, while in Norway, as well as in Denmark, it has been found possible to prepare an authoritative quarterly forecast of building activity partly with the help of the licence figures. With a longer period of validity it is difficult to tell what interval will elapse on the average between the authorizations and actual starts; and it is likely to vary from time to time according to conditions. The duration of the validity of an authorization is a year in most countries,¹ but it is easily renewable, and the administrative inconvenience is not sufficient to penalize delay.²

Difficulties also arise from the diversity of treatment of renewals in the statistics. In some countries, such as France and Norway, renewals are not recorded; in others, such as Belgium, they are treated as new authorizations. Similarly, there are differences in the ways of correcting for authorizations which have lapsed, though here the chief difficulty is that in many countries there is no way of knowing how many of them have not been used, in spite of the fact that in some countries—France, Germany and Italy in particular—the number of authorizations granted is, on the average, considerably higher than the number of completions one or two years later. The lapse of an authorization need not mean that a building project has been abandoned, but merely that the plans have been modified sufficiently to require a new authorization.

There is a great variety of practice as to the units in terms of which the figures are collected and published. This is indicated in Appendix IX. Authorizations for industrial and other non-residential building are often available only in terms of the number of authorizations or the number of buildings concerned. In Belgium the units used are no longer, as in recent years, merely the number of authorizations, one of which might cover several buildings at once, but the

number of buildings. There is still no difference made between a block of flats and a single house.

It is normal to include in tables of "authorizations granted" the figures published for Great Britain of industrial building approved, referring to the issue of Industrial Development Certificates by the Board of Trade. This in fact is a regional planning measure corresponding to the industrial building authorizations granted by the *Ministre de la Reconstruction et du Logement* in France. However, their validity is in effect unlimited once the further condition of local planning permission has been fulfilled, and, as under some other systems, there may be an incentive to obtain permission some considerable time before any actual start is contemplated. Also, a single Certificate may cover a large site, to be developed only in slow stages. A review of the last ten years of industrial building has recently been published by the Board of Trade.³ Among other indications, it is stated that of the area approved during the years 1948 to 1953 only 72 per cent has proceeded to the building stage.⁴ Hence it is necessary to apply considerable caution in interpreting, for instance, the fact that Certificates issued during the period April-June 1955 amounted in terms of square feet to double the figure for the same period of the previous year and to three times the quarterly average for 1953. "... some statistical indication of future investment can be obtained from approvals for industrial building... these give a rough indication of the likely direction of change. But they do not show how fast it will go, one way or the other, which is the information most needed".⁵

It is regrettable that figures on building starts should not be available in some countries and that the somewhat patchy data on authorizations should have to be used as a substitute. But even though the use of crude data on authorizations is unsatisfactory the system at least provides the basis for follow-up enquiries. The figures published for Great Britain for starts of industrial building (and also for completions) are now derived by following up the issue of Industrial Development Certificates. The follow-up procedure is also in force in the Netherlands, and, although at rather infrequent intervals, in western Germany as well as in the United States.

¹ But it may vary even between different regions of the same country.

² In Sweden, building permits have unlimited validity, but in the case of housing they are usually recalled after some months, if unused. Data on authorizations may be only a little in advance of the corresponding starts.

³ *Board of Trade Journal*, 20 August 1955.

⁴ With the intensification of pressure on building resources it seems probable that the delays and postponements will become greater than they have been in recent years.

⁵ *Bulletin for Industry*, H.M. Treasury, June 1955.

4. SURVEYS OF INVESTMENT INTENTIONS

The famous White Paper issued by the Coalition Government of the United Kingdom in May 1944 on "Employment Policy" set out the five principal classes of statistics "(in addition to those available before the war) which must be obtained for the efficient operation of an employment policy", and one of them was "regular information relating to savings, projected capital expenditure by public authorities, and, as far as possible, by private industry".¹ It is only now that a survey of capital expenditure by private industry is to be undertaken in the United Kingdom, but it is pointed out that "for a time after the war it was possible to assess to some extent the intentions of private investors from the knowledge that came in via physical controls on factory building, supply of steel, non-ferrous metals, etc. Now that the controls have gone, it has become an urgent need to find other means of assessing the investment intentions of private industry".²

It is the United States which has the longest experience of this form of enquiry, principally in the form of the surveys of prospective expenditure on plant and equipment undertaken jointly by the Department of Commerce and the Securities and Exchange Commission, whose results are published in the *Survey of Current Business*.³ Although reasonably good results are obtained, they are based on a relatively small and unevenly distributed sample of 2,100 firms, accounting for about 60 per cent of investment. The Canadian survey, which was started in 1945 in connexion with the policy of full employment, is much wider in scope. Not only does it cover all investment, including all construction, but the sample used in the industrial sectors is very large: 11,000 firms replied to the 1951 survey, and accounted for 80 per cent of total actual investment expenditure.

In western Europe surveys conducted on lines similar to the North American ones have been started since the war in Denmark, the Netherlands and Sweden. Figures are obtained for separate sectors of industry and for separate types of investment. Broadly, the method employed is to send out to firms towards the end of the calendar year a questionnaire about

(i) their actual investment in the previous year; (ii) a provisional estimate of their investment in the current year; (iii) an estimate of their prospective investment in the coming year. (In the United States the same questions are asked also early each quarter for the corresponding quarterly figures.) The survey which is about to be started for the United Kingdom will be conducted quarterly, the object being to obtain figures of investment expenditure during the previous quarter and, at the end of September, a forecast of investment expenditure in the coming year.⁴

The United Kingdom enquiry is addressed to about 650 companies, responsible for nearly three-quarters of the total capital expenditure of all public companies. This sample, which is described as representative, comprises all the largest companies together with a cross-section of others. Elsewhere the firms covered normally include all those employing more than 25 workers or so (in accordance with the procedure adopted for statistics about industrial production) and the results are then "blown up" on the basis of employment or some similar factor. In terms of total employment, the coverage for the Netherlands has recently been 93 per cent and for Sweden 80 per cent. For Denmark the figure is about 75 per cent but, while nearly all the firms deal with

TABLE I
Realized Investment as a Percentage of Intentions

	Netherlands	Sweden	United States	Canada ^a
1947 . . .	..	98	116	105
1948 . . .	..	102	103	113
1949 . . .	..	106	99	110
1950 . . .	91	116	128	113
1951 . . .	100	103 ^b	107	111
1952 . . .	99	99 ^b	110	106
1953 . . .	92	101	105	109
1954 . . .	94	110	99	93

Sources: Netherlands: *Investeringen in vaste activa*, Central Bureau of Statistics. Sweden: *Kommerstella Meddelanden*. United States: *Survey of Current Business*. Canada: *Private and Public Investment in Canada*, Department of Trade and Commerce.

^a Business investment.

^b Roughly adjusted for change in sample.

⁴ The quarterly estimates of actual expenditure will be collected one month after the end of each quarter. In order to provide a basis for the estimates, the first enquiry, which is now being conducted, asks for figures of expenditure during the year 1954, which will form a base year, but the object is to provide indications of changes in capital expenditure and not a total figure of corporate investment.

¹ H.M.S.O., Cmd. 6527, p. 27.

² *Bulletin for Industry*, H.M. Treasury, June 1955.

³ In addition, there is a survey undertaken by the McGraw-Hill Publishing Company, and there are other surveys covering particular types of investment. A detailed report on both the McGraw-Hill survey and the official one, with recommendations for their improvement, has recently been made to the Board of Governors of the Federal Reserve System, and published under the title *Statistics on Business Plant and Equipment Expenditure Expectations*.

TABLE 2

Netherlands : Intentions and Realizations
as Percentage of Previous Year's Realizations

	1951	1952	1953	1954
Intentions	112	118	90	128
Realizations	112	117	83	120

the question about past investment, the returns relating to prospective investment cover a much smaller proportion of total employment—it has been as low as 47 per cent and the most recent figure is 63 per cent.

Table 1 indicates the extent to which the predictions of the firms have proved correct in the aggregate under the Swedish and Netherlands surveys, with the results for the United States and Canada added for comparison. It should be noted that such comparisons are not necessarily conclusive, since surveys of this kind are, at best, reliable only in the absence of external changes which could cause firms to alter their plans. In particular, price changes in the period under consideration would normally have tended to make realizations greater than plans.

It will be seen that no great accuracy is obtained either in Europe or in North America. But this is not the only form of comparison which can be made. It has been shown that both in the United States and in Canada the surveys have been accurate in forecasting the direction of change between one year and the next, although the size of the change has usually been under-estimated.¹ The results of applying this test to the Netherlands survey are shown in Table 2 (in fact there was a discrepancy between plans and realization only for two out of the four years for which figures are available, the discrepancy being due to under-fulfilment by the public utilities, which are covered by the survey).

This method of comparison may be disturbed by systematic error in the forecasts of investment expenditure² and in fact another form of comparison, shown in Table 3, is the one which works out best for the Swedish survey.

¹ See *Short-Term Economic Forecasting* (Studies in Income and Wealth, vol. 17), National Bureau of Economic Research, Princeton University Press, 1955, papers 2 and 3.

² Such as a tendency for small capital outlays to be omitted from the forecasts (see Friend and Bronfenbrenner in *Short-Term Economic Forecasting*, *op. cit.*, paper 2).

TABLE 3

Sweden : Intentions and Realizations as Respective
Percentages of Intentions and Realizations
in Previous Year

	1948	1949	1950	1951	1952	1953	1954
Intentions	108	98	108	127	116	90 ^a	106
Realizations	112	102	118	113 ^a	111	92	115

^a Roughly adjusted for change in sample.

The Danish figures, mainly because of the variable, but generally low, response rate, could not appropriately be included in Table 1. The normal presentation in the annual article³ is a comparison between the plans announced for the coming year and the declared investment in the past year by the same group of firms. However, as can be seen in Table 4, the results obtained have not given a very good indication of the course of total investment.

The most important conclusions established in the National Bureau of Economic Research, as a result of "follow up" studies of the United States and Canadian surveys up to 1951,⁴ are:

(a) individual errors can be large but there is no serious bias, and if the sample is sufficiently big there is much cancelling out;

(b) accuracy is greater with large firms than with small ones and with investment plans which are relatively large rather than small (the former point may help to explain the unsatisfactory character of the results in Denmark, where industry is on the whole organized in small units);

³ In *Statistiske Efterretninger*. The most recent article appeared in the number of 3 September 1955.

⁴ *Short-Term Economic Forecasting*, *op. cit.*, especially pp. 236-238.

TABLE 4

Denmark : Intentions as a Percentage of Previous
Year's Declared Investment by Responding Firms
and Total New Investment as a Percentage
of Previous Year's

	1950	1951	1952	1953	1954
Intentions	115	117	91	96	93
Total new investment .	103	103	105	108	117

(c) forecasts tend to take insufficient account of the price factor.

In addition to the enquiries which require firms to return definite figures, the *Konjunkturtests*, described in the following section of this article, are capable of being used to obtain indications of the direction of the prospective change in investment. The unofficial French survey of business firms regularly includes a question about investment. The official French survey also deals with investment once a year and the form of the questionnaire is described in the next section of this article. In November 1954 returns were received from 1,225 industrial and 569 commercial enterprises, most of them relatively large. Forecasts can be compared only with the actual results declared in the survey of the following year. The forecasts for 1954

made in November 1953 and the results declared in November 1954 were as follows:

	Forecast Percentage of returns	Declared Result Percentage of returns
Higher than in 1953	32	46
Approximately equal	40	31
Lower than in 1953	28	23

Source: *Conjoncture et Mouvement des Affaires*, December 1954, p. 9.

The unexpected improvement in the economic situation in 1954 must provide at least a partial explanation of the discrepancies.

It will also be seen that the IFO Institute in Munich have launched a somewhat similar enquiry but that the results are not as yet to be published.

5. THE "KONJUNKTURTEST" METHOD

General Principles

In a number of countries in western Europe (as well as elsewhere) a new kind of sample survey of business firms is now being regularly carried out. It is usually described as the *Konjunkturtest* method, although perhaps—again to resort to the German language—*wirtschaftliche Tendenzbefragungen* is a better description. The pioneering work in this field was undertaken independently, and at about the same time, in a number of countries. The results of monthly surveys made by the Italian Union of Chambers of Commerce have been published since 1949 in *Sintesi Economica* and the surveys were actually started in 1947. In 1950 surveys of business firms were begun by the Munich Institut für Wirtschaftsforschung, known as the IFO-Institut, for western Germany, and by the French Institut national de la Statistique et des Etudes économiques (the French government statistical office) for France, though from the start the IFO survey was monthly and the French one half-yearly. Subsequently the Austrian Institut für Wirtschaftsforschung, the Swedish Konjunkturinstitut (the independent government business research institute), the Belgian National Bank and the Netherlands Central Bureau of Statistics have started surveys for their own countries basically the same as that of the IFO Institute, though the Swedish enquiry is quarterly, while the Luxembourg Statistical Office followed the French example, though on a quarterly basis.¹ In addition, other similar enquiries have been instituted, such as the half-yearly surveys conducted by *Mondo Economico* and the annual

surveys of the Société d'Expertise comptable fiduciaire de la France, while in Switzerland the Institut für Wirtschaftsforschung at Zurich have just made an experimental start.

The main feature of the *Konjunkturtest* is that by and large business men are not expected to look up or calculate figures in order to reply to the questions put to them. The questions are intended to be dealt with by a responsible executive who is in touch with the activities of the firm and its policy. He is not asked to give precise figures or precise percentage increases or decreases concerning actual or expected movements. What he is called upon to do is to give a simple appreciation in qualitative terms. Thus, in answer to a question on last month's turnover, he may be asked whether it was higher, lower, or the same, compared with the previous month, or he may simply be asked whether he considers it to have been good, satisfactory, or bad. Whatever the choice of answers offered, the underlying principle is always the same—that it can be made on the basis of personal knowledge of the firm's activity and of its policy, and that this can be done immediately and without looking up figures.

Another feature of the *Konjunkturtest* is that the survey is carried out as a sample survey. This feature is, however, though important in practice, entirely subsidiary. Most conventional statistics are also collected on the basis of a sample, and the main issues presented by the *Konjunkturtest* would still arise, apart from the usual problems of sampling, if it was applied to all the firms rather than only to some of them.

The main objects of such surveys can be summarized as follows:

¹ This survey is being discontinued.

(1) To obtain up-to-date information to a degree which may not be possible by traditional statistical methods. The publication of conventional statistical series is subject to time-lags which detract seriously from their usefulness. For example, the provisional index of industrial production in the United Kingdom is published one month after the end of the month to which it refers, but the indices for individual sectors of industry are published with a time-lag of two (and in some cases three) months. In western Germany the firms which collaborate in the IFO survey, and others who are entitled to receive the results, are in a position within ten days of the close of each month to judge whether the trend of production in each branch of industry was in that month mainly upward, stationary or downward, and similarly for all the other aspects of the business situation which are the subject of the survey. What has been said in earlier sections of this article about delays in the publication of figures about stocks and orders is here very relevant.

(2) To supplement conventional statistical series, which are not nearly as comprehensive as is desirable. It has been seen above that statistics concerning stocks and orders are very incomplete, quite apart from being seriously out-of-date in so far as they are available at all. As a result of the business surveys, it is possible to follow the general movement of stocks and of orders; and knowledge of this kind, even though it cannot be expressed in precise terms, is helpful for an appreciation of business conditions and the state of the economy. Frequently, also, it is possible to secure an idea of the extent to which stocks and orders in the various branches of industry are regarded as adequate by the business men concerned.

(3) To investigate the decisions of business men and their intentions in the immediate future. By the end of one month a firm's management is in a good position to know, subject to unforeseen circumstances, what will be the state of its activity in the following month. Production is under way and the availability of labour and materials can be assessed. Decisions about selling prices are likely to have been taken.

(4) To investigate business men's expectations about the near future (say up to six months ahead), in relation to their own lines of business and perhaps to the economy in general.

(5) To put, from time to time, questions of a special character. These may be put at regular intervals, or sporadically as occasion may demand.

It will be seen that the information which is sought by these business surveys falls into three groups:

(a) Information about facts belonging to the immediate past and judgments about the present.

(b) Information about decisions and intentions relating to the immediate future. To a considerable extent information of this kind will be a reflection of expectation rather than of certainty, but the expectation is, on the whole, of what the firm expects to do in the near future rather than of what it expects to happen. It is not, however, possible to draw a clear line of distinction between this group and the following group of information.

(c) Information about the market expectations of those concerned with the management of a firm, the emphasis here being on factors over which the firm has no direct control, such as orders and raw material prices.

It is important to realize that a very important and useful kind of information which is provided by these sample surveys belongs to group (a).¹ For purposes of business forecasting, it would be a great help if by some miracle conventional statistical series could be made available without any appreciable time-lag. The provision of information in group (a) is a substitute, though a very imperfect one, for such a miracle, and to that extent the task of the business forecaster is facilitated.

He receives further help from information in group (b), indicating the probable actions of firms in the near future.

As regards group (c), there is danger of misconception. On the whole the promoters of these surveys do not take the view that the best way of finding out what is going to happen to the state of trade is to ask the business men concerned, and to accept their guess as the best guess available. In other words, it is not usually their view that the information in group (c) is to be regarded as "a business forecast". On the other hand, it is their view that the expectations of business men are an important factor in determining the development of business conditions, and that it cannot be anything other than helpful to study their state of expectations even though, at some points of time and in some sectors of the economy, they may entertain expectations which will turn out to be hopelessly wrong. The world would be a very different

¹ This is the fundamental difference between these surveys and the ones carried out in the United States, notably by the periodicals *Fortune* and *Business Record*, and by Dun and Bradstreet, Inc., the broad results of the latter being published in *Dun's Review and Modern Industry*. These are almost exclusively concerned with business men's views on (i) the future prospects for their own firms and for the movements of inventories, sales, employment, etc.; (ii) (in the *Fortune* survey) the future state of business in general. Otherwise the methods employed are similar to those followed in western Europe. An appreciation of the accuracy of the forecasts contained in the *Fortune* and Dun and Bradstreet surveys is to be found in *Short-Term Economic Forecasting*, op. cit., paper 4.

place if business men were always right; and it would also be a very different place if they were always consistently wrong. It is the essence of the matter that sometimes business men's expectations turn out to have had a stronger justification than at other times.¹ But at all times information about their state of mind should, provided that it is properly handled, be a valuable supplement to more objective data.

This information is particularly useful if it is presented in such a way as to indicate the extent to which there is disagreement among the business men concerned about prospects. This is precisely the manner in which the results of these business surveys are presented. It should not, of course, be taken for granted that unanimity of optimistic outlook is necessarily a reason for optimism. Usually it is, but if an examination of all the other factors suggests the possibility of disillusionment for the optimists, unanimity must be regarded as accentuating the prospective set-back.

The needs of the government, concerned with evolving government policy, differ rather fundamentally from those of the business forecaster (which in their turn differ from those of the individual industrialist or trader). Some governments are concerned not only with what will happen if nothing is done to influence the course of events but also with what might be done to exert a favourable influence. Also the government usually has better access to as yet unpublished information about recent trends than private individuals and institutions.

The various business surveys which are here the subject of discussion differ considerably in their emphasis on the kind of information which is sought, as between groups (a), (b) and (c). Historically there is a distinction between the original IFO enquiry for western Germany and the original I.N.S.E.E. enquiry for France. The IFO survey is primarily designed to give a rapid and up-to-date assessment of the business situation for immediate use, and the major emphasis is on developments in the month under review, and, in the original form of the enquiry, on the firm's intentions during the following two months. By way of contrast, the I.N.S.E.E. enquiry in its original form dealt exclusively with business men's expectations for the next six months, and they were, and still are, asked to give a forecast not only about their own branch of business but also about the French economy as a whole. The distinction between the original concepts is underlined also by the fact that the IFO enquiry is conducted monthly and the I.N.S.E.E. one only every six months. As a result of

modifications, the IFO enquiry does, however, now include a question about prospects for prices and the general situation over the next six months in the firm's own line of business, and the I.N.S.E.E. include questions about the present position. The gap has, therefore, narrowed considerably, but its continued existence is pointed to by the fact that the results of the I.N.S.E.E. enquiry are still published under the title "Les Perspectives économiques pour le... semestre... d'après les chefs d'entreprises". It will be seen that most of the other surveys lean towards the one model or the other. The half-yearly survey made for Italy by *Mondo Economico* is exclusively concerned with expectations for the coming six months; whereas the monthly survey made by the Italian Union of Chambers of Commerce, and published in *Sintesi Economica*, was at one time exclusively and is still largely confined to the recent past.

The case for the surveys cannot, however, be made in all instances to rest on their usefulness to ordinary business forecasters (as opposed to government officials and workers in other privileged institutions). The results only of the French I.N.S.E.E. enquiry, the two Italian and the Luxembourg surveys are published in the full sense. Those of the IFO survey for western Germany can be secured by interested persons, and selected indications are published. A summary of the results of the Swedish survey is published. Up to the present, at any rate, those of the Austrian, Belgian and Netherlands surveys are not generally available at all.

In all cases the results are made available to the collaborating firms, at any rate so far as they concern their own line of business. The main argument against making them more generally available is that some firms would then be unwilling to collaborate, even though there is never any question of revealing the answers given by individual firms. This objection applies particularly to the publication of detail concerning specific products, as opposed to broad sectors or branches of industry and trade, but few of the surveys are in fact carried out in such detail. It is also argued that collaboration of the firms is more easily secured if as a result of such collaboration they obtain information which otherwise would not be available to them.

The strength of these arguments calls for more investigation than has so far been possible, but *prima facie* it does seem possible that in some quarters they are over-rated. Strong justification is certainly required for withholding either from business firms generally or from the public at large the results of enquiries of this kind, and confining them instead to

¹ Investigations into the reliability of expectations are mentioned later in this section of the article.

the collaborating firms and to certain privileged institutions and persons. On the other hand, it must be assumed that those who are responsible for organizing the surveys are good judges of the dangers and difficulties involved in wider dissemination of the results and of the importance of respecting the feelings of the business men concerned, whether justified or not. A compromise course which might usefully be more fully explored is that of sending the results to the collaborating firms a short interval of time ahead of general publication.

The fact that by collaboration a firm secures for itself a privileged position is liable to complicate the selection of the sample. From one point of view a sample should be as small as is consistent with its being reasonably good. But once the sample of firms is regarded as a basis not merely for collecting information but for the dissemination of information, this criterion ceases to have full validity. On this point there does seem to be some confusion of thought. It may be that in practice the question of positively excluding a firm which was anxious to receive the results of a survey, and was therefore willing to collaborate, has not frequently arisen as an embarrassing issue, but clearly it is one that should be faced.

In any case the importance of the surveys must partially rest on the usefulness of the results to the business men themselves. The initiative taken not long ago in Belgium and in the Netherlands has been solidly backed by the industrial organizations, which have encouraged the authorities to expand the field of enquiries. The usefulness to a business firm of information such as is provided by these surveys does not need to be emphasized. What is less clear is the extent to which in fact advantage is taken of these opportunities. The surveys are capable of being of particular use to the smaller firms, since large firms often have their own research and intelligence departments and generally are knowledgeable about what is going on, but, in those countries in which the results are available only to collaborating firms, the small firms do not show any very marked desire to collaborate in them as a means of obtaining the results.

By its nature a survey of this kind produces results which cannot be expressed in the conventional way by absolute figures, percentages or index numbers. Instead of revealing that, for example, production in a given industry was higher by so much in the month under review than in the preceding month, it can reveal only that of all the firms sampled such and such per cent had a higher output than in the preceding month, such and such per cent had a lower output and that the remaining firms had an unchanged output. A general upward or downward tendency may

emerge, or the percentages may be fairly evenly distributed, but in any event the magnitude of the change cannot be determined in any precise manner.¹

A better indication of the quantitative character of a change (whether involving fact or intention or expectation) can be secured if the number of possible answers to each question from which a choice has to be made is greater than the normal three. Thus the business man who deals with the I.N.S.E.E. questionnaire for France has to choose for many of the questions, including the most important ones, between five possibilities—for example, he has to decide whether the change in his output has taken the form of a big increase, a moderate increase, no change, a moderate decrease or a big decrease. This elaboration of the I.N.S.E.E. enquiry has been made in the course of experience. In Luxembourg, however, it has been decided in the case of nearly all the questions to confine the number of alternatives to three, and this is the general practice elsewhere, except that in the case of the enquiry conducted by *Mondo Economico* the number of alternatives is five and that the French Société d'Expertise comptable have moved over from three to five. It seems that the general view is that the possibility of greater precision should be sacrificed in the interests of facilitating the task of those who fill up the questionnaires.

A similar issue is presented by the question whether the firm should be given any quantitative guidance as to the range of variation which such a phrase as "no change" is intended to cover. When five rather than three possible answers are presented, this question assumes a more acute form. The view taken in the IFO Institute itself is that there is no suitable halfway-house between leaving the business man to indicate as a matter of impressionistic judgment how the situation strikes him and asking him to calculate precise percentages from elaborate returns. This view seems to be fairly widely accepted, although in Belgium a warning note is sounded that even a slight deviation should be regarded as a change rather than as "no change", because if it persists over a considerable period it will mount up to a substantial shift. In France the official I.N.S.E.E.

¹ Direct averaging of the answers to obtain the over-all change is not possible without knowledge of the actual percentage changes in the output of each individual firm. In an extreme case, even a modal tendency upwards may be associated with a decline in the industry's output: for example, a small rise in the majority of firms might be more than offset by more significant falls in the minority (though this is very unlikely to happen in practice). Attempts at averaging or giving quantitative expression to the reported trends necessarily imply assumptions about the distribution of firms between different percentage ranges of increase or decrease. Some reference to this "quantification" problem is made later in this article.

have almost completely abandoned the use of quantitative indications but the private Société have moved in precisely the opposite direction, the choice between the five possible answers to the questions being assisted by a quantitative statement of the ranges to be covered, as with the enquiry conducted by *Mondo Economico* in Italy. It must be said at once that the bias against quantitative guidance represents a possible source of serious weakness.¹

An extreme case of numerous possible answers, defined quantitatively, is provided by two of the questions included in the Austrian survey.² Although this entails a major departure from the IFO concept, it is not intended that the selection of the right answer should be made otherwise than on the basis of the personal judgment of those concerned with completing the questionnaire. For example, if a firm's daily rate of production has increased fairly heavily compared with what it was in the previous month, it should towards the end of the month be fairly easy for the manager to say whether the increase lies between 5 and 10 per cent or between 10 and 15 per cent.³ Even here the selection of the answer, subject of course to the possibility of error, is a very different matter from a precise statement of the actual percentage change.⁴

It is, of course, necessary, in working out the distribution of firms according to their answers, to take due account of their relative importance, as indicated by the size of their labour force, or turnover, or some other appropriate measure. Failure to apply even a rough weighting system (and often it can be no more than that) is likely, of course, to lead to a distortion of the true picture. Some system of weights is generally adopted (in Luxembourg the answers about expectations for the economy as a whole are not weighted, on the grounds that the opinion of a small firm in this respect is worth no less than that of a bigger one and, by reason of the nature of the enquiry, the *Mondo Economico* answers are not weighted).

¹ Investigations made by the Netherlands Central Bureau of Statistics on the answers given for month-to-month changes in production in the shoe industry indicate that on the average "no change" covers the range from -10 to $+10$ per cent (though the assumption of a range of -15 to $+15$ per cent leads to almost equally good results), but that this average conceals a very wide dispersion of interpretation by individual firms.

² For details see the Annex.

³ On the other hand, if the increase is fairly small he has to say whether or not it exceeded 1 per cent and this seems far less easy.

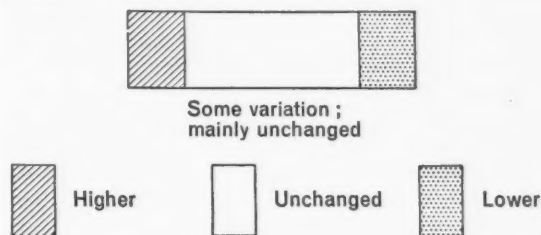
⁴ As another exception to the general rule, percentage ranges, or absolute numerical ranges, are often suggested for questions that are designed to elicit rough information, for purposes of weighting, on turnover and employment. Special questions may also provide a choice of ranges, for example, to find out whether current production uses 60-70, 70-80 or 80-90 per cent of capacity.

There is one sense in which the selection of the sample is never really random. The sample always includes a fuller representation of large firms than of small ones. If there is any correlation, as there often will be,⁵ between the size of a firm and the answers which it tends to give, a bias is introduced into the results. This can be removed by a process known as stratification. The firms in the sample are divided into two or three sub-samples, grouped according to size, and within each sub-sample the weighting is carried out in the usual way, but in addition a weight is applied to each sub-sample equal to the reciprocal of the percentage indicating its relative size.

Stratification is carried out in this way only in Sweden (where firms are sub-divided into three groups) and in Belgium (for retail trade, where there is a considerable difference in the sampling percentage of big and small firms). Stratification by size is, of course, of less importance when the sample in any event covers a rather high proportion of total output, as for instance in the Netherlands and Austria, but could usefully be applied in other countries, where the proportionate size of the sample is relatively much smaller and differs considerably between big and small firms, as in France.

One practical difficulty in stratification is the necessity of full knowledge of the national aggregates for the different groups of firms. For example, for western Germany it is not possible to stratify because national data for industry by size of firm are available only by branches and not by individual commodities.

The presentation of the results can be tabular but is often pictorial. The IFO model, now widely imitated, of pictorial presentation is designed to facilitate a rapid appreciation. The three alternatives are each given a colour (or shading) and the distribution of the colours in a rectangular block is proportionate to the weighted distribution of answers. For example, if production compared with the previous month was unchanged for a weighted 80 per cent of firms, lower for a weighted 9 per cent, and higher for a weighted 11 per cent, the result would be shown as follows :



⁵ As is revealed by the published analysis of the results of the I.N.S.E.E. survey for France.

Perhaps the most serious difficulty in the interpretation of the results of these business surveys is that caused by seasonal variation. It presents itself in a much more acute form than when it is a matter of dealing with an ordinary time series, because a normal method of adjustment for seasonal variation cannot be applied. If a movement indicated by a business survey appears to be in the direction opposite to that of the normal seasonal variation, the difficulty does not arise, but if it is in the same direction it may be difficult or impossible to say whether the trend is upward or downward.¹ The adoption of five rather than three possible answers, which helps to indicate the size of the change, provides a partial solution of the difficulty. But, as has been seen, this method is rarely used.

An obvious method of trying to take care of the seasonal element is to ask for a comparison with the corresponding period of the preceding year rather than with the preceding period. The extent to which this way round the difficulty is adopted varies considerably between the different surveys. A disadvantage of the method, if it is used exclusively, is that it conceals the current trend. Some use of it is made in all the business surveys, except in those for the Netherlands, and (in the case of the engineering industries) for Sweden, and in the two Italian surveys. In France the I.N.S.E.E. now base almost all their questions on this type of comparison. Many of the questions contained in the Luxembourg survey require both kinds of comparison to be made. In Germany the IFO questionnaire for trade is based largely on comparison with the same month of the preceding year, but in the case of industry such a comparison has been introduced only recently and only for one simple question (on turnover), while also in Austria and Belgium only very limited use is made of this kind of procedure.

One reason why it is not utilized more comprehensively is that, strictly speaking, it is not fully compatible with the major principle on which all these surveys are based. The idea is, to put it crudely, that the answers shall be given "out of the head" of the person who fills up the questionnaire. This is a not unreasonable goal when it is a matter of comparison with the preceding month or even the preceding quarter. When, however, a comparison is asked for with the corresponding period of the preceding year and the change has not been a particularly marked one, it almost inevitably necessitates resort to actual records (which will often not be available at all and which in any case will involve delay) if it is to be

effected with reasonable accuracy, the more usual alternative no doubt being the submission of seriously incorrect results. Better results could probably be obtained if the business man were asked to compare this season rather than this *month* with the corresponding period of the previous year.

Another possibility, and perhaps a preferable one, is to ask for the seasonal factor to be taken into account in the comparison with the preceding period. In France the I.N.S.E.E. enquiry includes a question about the general trend of the firm's business after allowance has been made for seasonal variation. This places considerable weight on the judgment of those concerned with giving an answer to the question, but it is not inconsistent with the major principle underlying these surveys. In fact, however, the method is rarely employed (in Belgium an additional question is put as to whether the reported change is seasonal or not). Moreover, the complications introduced by the seasonal factor are aggravated by a rather unhelpful, because quite unpredictable and unsystematic, tendency of the business man to allow for it even when he is not asked to do so,² as well as possibly failing to make adequate allowance when he is asked to.

In so far as seasonal adjustment is not possible in any systematic manner, it is useful, for the purpose of analysing the results of a business survey, to make an occasional *ad hoc* enquiry into the seasonal pattern. This is done, for example, for France by the I.N.S.E.E. in the form of a request to firms to indicate the normal seasonal movement throughout the year. In the case of Belgium the firms are asked annually to state which are the months of seasonal peaks and of seasonal troughs. For Germany the IFO Institute occasionally undertakes a similar enquiry.

A more detailed account of the various western European business surveys of the *Konjunkturtest* variety is contained in the Annex to this article.

Special Questions

One of the incidental advantages of a business survey is that questions of a special character can from time to time be put. But some surveys regularly include questions which are outside what has come to be regarded as the normal scope of these surveys, e.g., the questions regularly put for France by the I.N.S.E.E., and more recently by the Société d'Expertise comptable, about the factors limiting activity; the questions regularly included in the Swedish survey

¹ But of course even with an ordinary time series seasonal adjustment is often very difficult.

² Such a tendency has been revealed in the answers about output by an investigation in the Netherlands Central Bureau of Statistics.

about orders placed for machinery and equipment and about labour shortages; and many of the questions regularly included for Italy under the survey reproduced in *Sintesi Economica*.

The most important special questions relate to investment and the utilization of capacity. The I.N.S.E.E. usually alternate between one of these and the other. Once a year, therefore, they include questions about investment in France. On the last occasion—November 1954—the scope of the questions was enlarged. They took the following form:

1. Investment by your firm in 1954

- | | |
|--|--|
| (a) Investment in 1954, compared with 1953. | Bigger / about the same / less / no investment in 1953. |
| (b) Purposes of investment in 1954. | Launching new products / increasing output / lowering unit costs / improving quality. |
| (c) Rough percentage breakdown of 1954 investment. | Equipment ... per cent
Buildings ... per cent
Other (specify) ... per cent |
| (d) Rough estimate of the value of 1954 investment. | 0-1, 1-2, 2-5, 5-10, 10-20
..... 2,000-5,000 million Fr. fr. |
| (e) Investment in 1954, compared with that planned. | 0-10, 10-20, 20-30 ... per cent |
| (f) Difficulties of financing in 1954, compared with 1953. | Greater / the same / less. |
| (g) Share of total investment financed by outside sources. | Bank credit ... per cent
Capital market ... per cent
Public funds ... per cent
Other (specify) ... per cent |
| (h) Rate of interest and other charges for funds raised. | Rate of interest ... per cent
Other charges ... per cent |

2. Firms not having invested in 1954

- | | |
|--|--|
| (a) Did you invest in 1953 ? | Yes / no. |
| (b) Reasons for not investing in 1954. | Investment projects completed before 1954 / not necessary in present market conditions / inability to obtain external funds / external financing too expensive. Other reasons (specify). |

3. Investment plans for 1955

- | | |
|--|--|
| (a) 1955 compared with 1954 actual. | Greater / the same / less / none in 1954. |
| (b) Rough percentage breakdown of 1955 investment. | Equipment ... per cent
Buildings ... per cent
Other (specify) ... per cent |
| (c) Do you need to rely on external financing ? | Yes / no. |
| (d) If so, compare with financing in 1954. | More than in 1954 / about the same / less than in 1954. |

4. Firms not planning to invest in 1955

- | | |
|---|--|
| Reasons for not planning to invest in 1955. | Investment projects already completed / not necessary in present market conditions / unlikelihood of obtaining the necessary funds. Other reasons (specify). |
|---|--|

The questions asked fall very clearly into two parts. There are first those which, like the majority of the regular questions in business surveys, seek to obtain answers in qualitative terms about quantitative data, and then there are those which seek more general information as to motives, purposes and methods. The results are published in *Conjoncture et Mouvement des Affaires*¹ and later, in revised form, in *Etudes et Conjoncture*.²

The IFO Institute have recently launched an elaborate enquiry on somewhat similar lines about investment in western Germany, but it includes questions on actual capital expenditure. The sample consists of rather more than 1,000 firms, and it differs from the regular sample of the monthly survey. The investment survey is still regarded as experimental. The response rate, and the sample itself, are not regarded as entirely satisfactory, and though it is intended to repeat the survey annually, for the present the results will not be made available, except to the collaborating firms.³

Typical of other special questions are the following :

Austria :

Capacity utilization; credit facilities for industry; hire-purchase conditions for retail trade. Investment has not been covered. The results are published as *Beilage* to the Institute's *Monatsberichte*.

France :

Capacity utilization, firms being asked within which of a number of alternative percentage ranges is the amount by which their actual production falls short of the maximum possible production with existing equipment, and whether stepping up output to capacity levels would increase, decrease or leave unchanged average costs. The results are published with those of the regular I.N.S.E.E. survey.

Western Germany :

Capacity utilization (whether capacity has been enlarged, the degree of utilization and the average number of shifts worked); shortage of skilled labour; expectations for exports; delays in payments made to suppliers in retail and wholesale trade; expectations (each November) of Christmas sales.⁴ The results are not made generally available but are sometimes referred to in a general way in *IFO Schnelldienst*,⁵ and are also sometimes used as background material for articles in the Institute's quarterly *Wirtschaftskonjunktur*.

¹ E.g., December 1954.

² E.g., March 1955.

³ See, however, *Schnelldienst*, 7 October 1955, pp. 4-6, where some results of questions relating to 1954 are presented.

⁴ Contrary to the usual IFO practice, percentage ranges are used to indicate the possible answers. On a comparison of sales with those of the preceding Christmas the question is whether they are expected to be worse, about the same, about 5 per cent better, about 10 per cent better, or more than 10 per cent better.

⁵ Or even in detail: for example the results given of the last enquiry into the shortage of skilled labour in the issue of 26 August 1955, pp. 1 and 7.

Verification

The first question which naturally presents itself is how far the results of the surveys are borne out by the facts in so far as they can be subsequently established from other sources of information. It must be admitted that too little work has been done on this question to enable any general conclusion to be reached. One reason is that the surveys have been in operation for only a short time. And the fact that the period in question has, on the whole, been the occasion for a pronounced upward trend of activity also detracts from the authoritativeness of any provisional verdict which might be reached (though it should be noted that much of the work in this field of the IFO Institute has been concerned with industries like the textile industries, for which this observation is not valid).

The Netherlands Central Bureau of Statistics have made investigations into the reliability of the results of their survey of the shoe industry. Among the conclusions arrived at are the following:

- (a) Comparisons were made covering a period of eighteen months between the answers given in the survey on the outlook for the coming months and the answers given a month later on the actual position. It appears that in respect of production there was agreement between prospects and realization in 76 per cent of all cases, for stocks in 59 per cent and for orders in 54 per cent of all cases. (All these percentages are weighted averages.)
- (b) The results of the survey were compared for a large and representative sample of the firms with the monthly statistical returns of the same individual firms. The correspondence between the results of the survey and actual statistics is, for individual firms, often slight. The main reasons for this are:
 - (i) The statistical data supplied by firms often refer to four or five weekly periods, whereas the survey answers relate to calendar months.
 - (ii) The definition of "production" for the statistical returns is the number of pairs of shoes produced. A firm answering the survey questionnaire is probably more inclined to think of "work done" than of numbers of pairs produced. For instance, in July, when preparations are made for the winter season, the number of pairs of shoes produced may decline temporarily, since time is spent on reorganizing production, but this may not be registered as a decline of pro-

duction in response to the survey questionnaire.

- (iii) The survey deals with the daily production. Daily production in actual statistics is calculated by dividing the monthly production by the number of working days, but the number of working days cannot always be calculated exactly.
 - (iv) Some factories produce other kinds of shoes in addition to leather shoes, but the distinction may not always be clearly in mind when the survey questionnaire is being completed.
 - (v) A number of less important reasons for a decline of production (*e.g.* funerals, jubilees, etc.) are often not taken into account under the survey.
 - (vi) As has been indicated above, "no change" is widely defined. Some firms consider changes as large as 15 per cent as "no change". (It is not evident, however, that firms are more inclined to report "increases" than "decreases" or *vice versa*.)
- (c) Differences between survey results and actual statistics are less for the total of all firms than for individual firms, i.e., errors tend to cancel out.¹

It was pointed out earlier in this article that the information provided by the business surveys falls into three groups: estimates of (a) actual facts and judgements about the present, (b) decisions and intentions, (c) expectations. It is important to distinguish between these three groups in dealing with attempts at verification of the results of the surveys. The really important issue relates to the first group—information taking the form of actual facts. This, of course, is the easiest group to investigate, but even here the process is not without difficulty, because the coverage of the surveys is usually different from that of regular statistical series, and in particular is usually narrower. Apart from comparison with regular statistics, rough confirmation is to be found in the internal consistency which can often be traced in the results of business surveys. For example, a study has been made in the IFO Institute of the relationship for the shoe industry between the movement of prices and the attitude of firms on the question whether their stocks of finished products were too big, adequate or too small.²

¹ This is contrary to the conclusion reached in items 1 and 2 of Appendix VI.

² See item 11 of Appendix VI. For another example see page 13 of item 3.

There is no clear-cut line of distinction between the second and third groups of information. As soon as any attempt at comparing the results of a survey with facts, as subsequently indicated from other sources, is extended beyond the realm covered by the first group, it is no longer a matter of verifying the validity of the surveys but of examining the extent to which business men do in fact carry out their intentions and the extent to which their expectations turn out to have been justified. For this kind of study business surveys are capable of providing a considerable mass of material. Some of it has already been examined, again especially in the IFO Institute. A short list of publications in this field is included in Appendix VI. The material is very largely the answers to the IFO questions about firms' intentions and expectations in relation to production and selling prices for the coming month. To illustrate the kind of tendencies which have so far emerged, reference may be made to Professor Theil's conclusion that buying and selling prices are more successfully predicted than such variables as turnover and production, and that stocks are the least successfully predicted; also that in the branches which are near to the ultimate consumer there is more success in predicting price movements than in the higher branches.¹ From an examination of turning points in production in various sectors of the textile industries it was found that a little more than one-half of the anticipated turning points turned out to be actual ones.²

As a basis for forecasting, one advantage over conventional statistics offered by business surveys, to which attention has already been drawn, is that they reveal the degree of dispersion in the actions, intentions and expectations of the various firms in a particular branch of industry. A fruitful field of study is likely to be offered by the relationship between the development of different views among the firms and subsequent changes in the situation.

Consequences of Dissemination of Results³

An important question is how far the reactions of the firms themselves to knowledge of the results of a survey can be relied upon to be harmonious and to promote the general interest. It would, of course, be unrealistic to suggest that because of any doubts on this account the results should be withheld from the collaborating firms. But if on balance it could be

maintained that dissemination was harmful, this would constitute an argument for keeping the sample of firms as small as was consistent with its being a reasonably good one and for withholding the results except to the collaborating firms. If, on the other hand, it is accepted that in general it is helpful that each firm should be aware to the maximum possible extent of developments in its branch of industry, this argument loses force (and, alternatively, becomes an argument for making the results generally available, if that is feasible without too seriously prejudicing collaboration in the survey). In any case, it is doubtful whether to any important extent firms have been definitely excluded from forming part of the sample in any of the surveys and it would be difficult to justify such exclusion, particularly on the part of a public body.

The interests of a branch of industry as a whole will often suffer from anything which improves the operation of competitive forces. One strong argument from the point of view of the general interest against dissemination of the results of business surveys lies in the possibility of a wave of unjustified pessimism or optimism being generated and propagated.⁴ There are occasions when such a danger is genuine. Against the general weight of the argument on the other side it does not, however, seem decisive (though when it is a matter of selecting what should or should not be said in a published journal about the results of a particular month's survey, it is rightly taken into account).

Another factor to which undue importance seems sometimes to be attached, as part of the case against making generally available the results of business surveys, is the danger of misinterpretation. It is, of course, a real one and arises particularly over the indications of business men's expectations. But in any case the results have to be issued to the collaborating firms and if the argument were at all strong it would seem to point to issuing with the results some suitable editorial note⁵ rather than to confining the results to a particular group of firms as a means of limiting the extent of any dangerous influences.

⁴ There is a more important exception to the general principle in favour of the widest possible dissemination of information. The publication of investment intentions may on occasion lead to "explosive" results, e.g. the discovery that a general decline in investment is about to take place causing business men to become justifiably less optimistic about the future, with the result that the decline in investment and in activity is reinforced. But the investment intentions which may thus cause trouble relate to industry as a whole and not to any one branch, and the issue is therefore relevant only to surveys dealing with investment intentions generally, such as are discussed in Section 4 of this article.

⁵ As is done with the Netherlands and Swedish surveys.

¹ See item 8 of Appendix VI.

² See item 3 of Appendix VI.

³ Cf. the discussion by Dr. Strigel of the IFO Institute, "Neue Wege der Marktbetrachtung: Der IFO-Konjunkturtest", *Der Arbeitgeber* (Vienna), Heft 11, 1953.

A related question is how far firms may deliberately misrepresent the true state of affairs in answering the questionnaires. There is first of all the danger of actual collusion. The object of such collusion might be to deceive competing firms or firms with which members of the group had trading relations. Or it might be to deceive the authorities—with a view perhaps to receiving some concession from the government. If the number of firms in the sample is large and the industry is competitive, active collusion is most unlikely. But in a cartelized industry, or an industry which is dominated by a few large firms, it is a very distinct possibility. If the number of firms in the sample is small, collusion would be easier to organize, though it may not always be possible to discover which the collaborating firms are.

Much more probable is *tacit* collusion—the kind of collusion which is simply an aspect of the corporate spirit, though it may perhaps be supported by general gossip between business men as opposed to any organized campaign. Tacit collusion is especially likely at a time when those engaged in a particular line of activity are trying hard to enlist the sympathies of the public or the assistance of the government.

Apart from collusion, deliberate misrepresentation is likely only on the part of a firm which is so large as to occupy a dominant position. For example, a large firm which wished to reduce its selling price ahead of its competitors would not wish its intention to become known in the form of a marked tendency in that direction revealed by the survey and it would be tempted therefore to conceal its intention.¹

Misrepresentation, if conducted persistently and heavily, has to be very ingeniously organized to avoid risk of detection. The general view is that serious misrepresentation is not widespread. It is often maintained that the danger is reduced by limiting the availability of the results of a survey, the argument being that wider publicity would drive business men into these practices. The extent of the danger obviously varies considerably from one country to another, according to differences in national characteristics and in the structure of industry. This helps to explain the wide differences of practice governing the availability of the results of surveys. It provides, however, only a partial explanation and the real question is whether misrepresentation is more frequent in those countries where the results of the surveys are accessible to anybody who is interested in securing them.

¹ Cf. O. Anderson, Jr. and W. Marquardt, "Preisentwicklung und Preiserwartung bei oligopolistischer Produktion im Spiegel des Konjunkturtestes", *IFO-Studien*, Heft 1, 1955.

Subsidiary Studies

At the IFO Institute the material provided by the surveys is being used to analyse the organic composition of movements in industry and trade. It is, for example, possible to examine a downward price movement with a view to discovering whether it is instigated by large firms or small and whether, size of firm apart, there is a persistent tendency for the same firms to act as "price leaders".

One advantage of the highly detailed breakdown of industry and trade by commodities and branches on which the IFO type of survey is based is that it is possible also (as it is not normally with conventional statistics) to study the development of a movement through the successive vertical stages which separate the production of the raw material from the ultimate sale to the consumer.

Work of this kind is facilitated in the IFO Institute by a treatment which is partially micro-economic in character, involving the study of the behaviour of individual firms, whose actions, intentions and expectations can be followed from month to month. In this way it has been possible to advance the work on the character of business men's expectations. For example, some evidence has emerged that expected prices tend to be higher than turns out to be justified, whether the movement is upward or downward. The explanation suggested for this asymmetry is a reluctance to admit an intention to cut prices but no such reluctance to admit an intention to raise them. The operative factor here would be the corporate feeling which inspires dislike of spoiling the market. When, on the other hand, it is a matter of reporting actual price changes it is thought that it is concern for his customer which dominates the mind of the business man and that he is readier to report a reduction of prices than an increase.²

Quantification of the Results

Examination of the IFO *Konjunkturspiegel*, or of any other similar presentation of the results of a monthly survey, demonstrates that unless a movement is very sharp from one month to the next there are always some firms whose behaviour, intentions or expectations are contrary to the predominant trend and that it seldom happens, no matter how sharp the movement, that there are not an appreciable number of firms which report "no change". It is, of course, possible that part of the explanation is that the product, even in the case of a single "commodity" or "branch", is far from homogeneous and that different

² See item 5 of Appendix VI.

firms specialize in different varieties, some of which are subject to contrary movements.¹ A similar possible explanation is that the differences arise from regional divergence in the behaviour of demand and so on. All this calls perhaps for further examination. But it is usually assumed that the firms can be regarded as producing identical products subject to one common set of influences. The excess of the (weighted) percentage of positive over the percentage of negative answers has been adopted as a quantitative measure of the *strength* of the movement between any two months and will here be described by the word *Saldo* (meaning balance) which is used by the IFO Institute.² It is in fact this *Saldo* which has been employed to verify the reliability of business surveys, by being set against the changes in the index number constituting the conventional time series describing the same factor. This indeed is the only available method of verification unless one is simply to be satisfied with confirming that positive and negative *Saldos* were associated with respectively positive and negative changes in the index number, and that arithmetically large and small *Saldos* were broadly associated with respectively large and small movements in the index number; or unless it is possible, as it sometimes is, to conduct a micro-economic investigation of the individual firms, comparing their actual behaviour, as revealed by independent statistical returns, with their individual answers given under the survey.

What in fact has emerged, largely as a result of the work done in the IFO Institute, is that the relationship between the *Saldo* of a survey and the index number of conventional statistics is often much closer than is necessary simply for verifying the reliability of the survey, and that in fact it is worth while attempting a close fit between the two series and applying the methods of regression analysis. Once a reasonably valid regression equation has been established for a particular series, by fitting the *Saldos* for successive months to the month-to-month changes in the conventional index number, it is claimed that it can be used to convert the most recent figures for the *Saldo*, obtained from the survey, into estimates of the change in the index number. This would enable the index number to be brought up to date, on a provisional basis, well ahead of its becoming available in precise form: the answers of a qualitative character given for individual firms in reply to the survey would be converted into a figure indicating the actual over-all change in terms of a percentage. This process is

known as "quantification" of the results of a business survey.

The whole issue of quantification must be regarded as still at the exploratory stage. Some of the publications on the subject are included in Appendix VI.³ But it appears that there is still much work to be done before the process of quantification is established as a practical method of bringing conventional statistics up to date, and no instance is known of its actual use to produce estimates of indices which are due to be published at a later date.

On the purely technical side there has been considerable development. In some experiments the regression of the accumulated *Saldos* on the index number itself was calculated, in others the actual *Saldo* for the month has been compared with the change in the index number between one month and the previous month.⁴ The regression which is attempted is usually linear, but non-linear equations often lead to better results. Multiple regression analysis may also offer advantages, positive and negative *Saldos* then being treated separately rather than being added to one another algebraically. Of late this method of treatment has tended to replace the earlier method based on the net balances, except where the computation involved would be too complicated (because, for example, of an assumption of non-linearity in the regression).

What can at least be said is that the results so far published indicate a close correlation between the *Saldos* (or the accumulated *Saldos*) and the changes in the conventional index number (or the index number itself). It is difficult, at first sight at any rate, to appreciate the reason why the correlation is so close. For the difference between the *Saldo* and 100 per cent, which would represent complete uniformity, is essentially an expression of the dispersion of behaviour, or, as the case may be, of intentions or of expectations of the business men concerned. This dispersion may, as has been said, arise because the product is made up of different varieties, some of them perhaps subject to contrary changes in demand, or because demand may change in contrary directions in different parts of the country. In so far as this was the explanation of the fact that very frequently different firms move in

³ Objections raised in item 21 are replied to in item 17 by Dr. O. Anderson Jr., who is the pioneer in this field at the IFO Institute.

⁴ See, for example, O. Anderson Jr., page 4 of item 18, Appendix VI. The accumulated *Saldo* is obtained, starting from some initial point of time, by adding up algebraically all the *Saldos* for the individual intervening months. If this can be correlated with the net change in the index number which has occurred since the initial point of time, it can also be correlated with the index number itself.

¹ This is confirmed by experience in the Netherlands.

² It can be regarded as the weighted arithmetic mean if the three answers are represented by +1, 0 and -1 respectively.

contrary directions, it would be entirely inconsistent with the idea of any close correlation between the degree of *net* change for the product, and the country, as a whole and the degree of the dispersion. If this explanation is therefore dismissed, one is forced back, to explain a close correlation, on the idea that there is a *quantitative* relationship between the size of the *net* change and the degree of lack of unanimity with which business men act or with which they frame their intentions or expectations. What would at first sight seem natural is that at some stages a given net increase in, say, the aggregate output of a group of firms between two successive months would take place under a stimulus which was fairly unanimously accepted as favourable (each firm increasing its output a little), while at other stages the same net increase in aggregate output would take place under an influence as to the interpretation of which there was wide disagreement (some firms increasing their output considerably, but others keeping their output unchanged and some actually reducing their output).¹ But though this would seem natural it does not fit in with the idea of a consistent relationship between the dispersion of behaviour of the business men and the net change. This is the fundamental issue.

It would seem that at best, even if quantification could provide provisional values for an index number which over a period would average out very well in comparison with the precise values when subsequently ascertained, some of the individual figures for particular months might be subject to a considerable margin of random error. This in itself, if it is correct, would seriously detract from the usefulness of the method.

It is possible to indicate what kind of hypothesis might lie behind the correlations which have been established. The simplest and also the most unrealistic hypothesis of this kind is that, in the particular branch of industry in question, the average month-to-month increase per firm (weighted by size of firm) for all those firms for which there *is* an increase remains the same at different points of time; that the same is true of the average decrease per firm for all those firms for which there *is* a decrease; and that, except where multiple regression analysis has to be employed, the average increase is equal to the average decrease. In other words, a big over-all change over a given period of time differs from a small over-all change over a period of time of the same length only in that more firms are the subject of increase and less of

decrease, and not in that firms are the subject individually of bigger increases and smaller decreases. Such a hypothesis can be provided with a somewhat fanciful foundation if the factor which is being measured is output,² but if this is successfully done with the aid of sufficient imagination it is very hard to see how it can be extended also to such factors as prices, orders, and stocks, which are also the subject of these surveys. But of course the hypothesis is not advanced as a practical suggestion—merely to assist the mind in visualising how these correlations are conceptually feasible. More complicated, and *a priori* less unrealistic, hypotheses can be devised. But they all involve the idea of unique patterns of dispersion of behaviour for each value of the output, or whatever the factor under consideration may be, of the industry.

A further hypothesis of the same kind, but this time necessary rather than sufficient, is that the limits of what constitutes “no change” in the minds of those who complete the questionnaires remain the same, for each branch of industry, equally at times when little change is going on and when changes are frequent and large. The implicit dimensions of the “no change” bracket are in fact buried in the constants of the regression equation.

For France the I.N.S.E.E. have recently attempted quantification without the use of regression analysis and therefore without the need for any conventional statistics with which to establish a fit (this, if successful, would very much widen the field, for comparable conventional statistics are not usually available). They are able to do this by introducing as part of the data the actual limits (measured in percentages) of the range denoted by “no change”. This is explicitly provided in their own questionnaire in dealing with the French economy as a whole, but for separate sectors a guess has to be made as to the manner in which the business men implicitly interpret “no change”. It is also necessary to make some very bold assumptions about the dispersion of the changes under investigation as between the different firms.³

Some work on the question of quantification has been started by the Belgian National Bank. Nothing is known of any attempts to apply these new processes to the results of these surveys in other countries.

In Austria it was definitely decided that the IFO method of quantification was not appropriate to conditions in that country. The reason is that the number

¹ If changes in the degree of unanimity took place only gradually over time they could be allowed for by modification of the regression equation, but changes of this kind must often be rapid.

² See O. Anderson Jr., page 210 of item 15 and page 16 of item 18 of Appendix VI.

³ See *Etudes et Conjoncture*, March 1955. What in fact emerges is an estimate of the median change. This will differ from the arithmetic mean to the extent that the distribution is skew.

of firms in a particular branch of Austrian industry is often quite small, or one or two large firms dominate the rest, or a cartel is in operation. The result is that very often the answers provided by the survey are 100 per cent, or about 100 per cent, positive or negative and there is no basis for correlation between the *Saldo* and the other series.

The fact that in Austria there is no basis for operating the quantification method helps to explain why the Institute, for the questions about daily production and about incoming orders, introduced 17 alternative steps, quantitatively defined, in the manner described in the Annex. The Institute have to make some assumption about dispersion within the separate steps (and the two outermost ones are "open-ended"), but they are able without appreciable delay¹ to produce index numbers on which reasonable reliance can usually be placed. It is conceivable that this alternative method, although prompted by the special conditions prevailing in Austrian industry, may ultimately prove the more useful and reliable one in practice, despite the complication which it introduces into the form of the questions. The extent of this complication can perhaps be too easily exaggerated. What can be easily admitted is the great advantage, in terms of avoiding trouble and saving time, of not asking for definite figures. It is not so clear that this should mean in practice that, in the case of all questions which are included in a survey, the business man should be given the choice of only three answers, one of which—"no change"—may involve him in a difficulty of interpretation which outweighs the troubles which the simple presentation is intended to avoid.

Conclusion

Business surveys of the type here described are a post-war development in western Europe of rather recent origin. Few of them were started before 1954, and in particular those which were consciously based on the IFO system as a model are all of recent growth and do not as yet cover the full range of industrial

and commercial activity. No doubt this method of enquiry will be extended to some of the other countries. But the only known case is that of Switzerland. A business survey is conducted there (through a special group) by the Institut für Wirtschaftsforschung at Zurich (affiliated to the Eidgenössische Technische Hochschule), where for the past eighteen years representative business men from industry, trade and banking have been meeting every month to discuss the situation and prospects in their respective fields, with a view to studying business cycle experience. The Institute recently started a business survey, using the members of the group as the sample. It is carried out before each session of the group. Although the most important firms are included for each branch it is too early to say how far it is representative. The results of the survey, like the other proceedings of the group, are confidential and are not available outside the group. The possibility of starting a business survey on broader lines is being kept in mind.

The foregoing pages pay tribute to the extent of the problems to a solution of which the variations of practice and experience in the different countries are capable of making valuable contributions. One example may be picked out—not entirely at random. The problem of seasonal variation is dealt with in various ways in the different surveys. Has one method proved itself superior to another? Or is quantification the only solution? And if so by what process? For the purpose of exchanging experiences there exists an informal Comité international des méthodes conjoncturelles (CIMCO), which brings together from time to time the persons responsible for conducting the surveys in the various countries. It is to be hoped that before any new business survey is started full advantage will be taken of the experience gained from the existing ones. It seems to be a valid criticism that standard procedures have been allowed to crystallize too fast and that orthodoxies have become established without proper opportunity for criticism. There are obvious difficulties and objections involved in altering the form of a survey once it has been launched (though these should be decisive only in preventing frequent and minor changes). Any new survey would provide a far better opportunity for introducing improvements and innovations.

¹ Though the inclusion of these elaborate questions does slightly prolong the process of completion of the questionnaire by the business man.

ANNEX

PRINCIPAL FEATURES OF THE IFO AND OTHER BUSINESS SURVEYS

The IFO Konjunkturtest

The Munich IFO-Institut für Wirtschaftsforschung, an independent economic research institute, have since 1950 undertaken every month a sample enquiry into business conditions in western Germany, the results of which are presented in *Konjunkturspiegel*. The number of firms participating in the survey has grown continuously. It began with 75 early in 1950 and has now reached a figure of 6,000; 3,400 are drawn from industry and the rest are equally divided between wholesale and retail trade. About 66 per cent of all industry is covered, the main exceptions being steel, coal and shipbuilding. Building, too, has hitherto been excluded: the organization of that industry does not easily lend itself to an enquiry of this kind, but it is hoped soon to overcome the difficulties. Nearly all branches of wholesale trade in consumer goods and of retail trade are covered, but for wholesale trade in raw materials and semi-finished goods only about one-half of the field.

The selection of firms has been made with the assistance of trade federations, but there are a few which volunteered independently to participate. On the whole it is thought in the Institute that the sample is now a fairly good one. The industrial firms in the sample employ almost one million persons, out of a total for the branches covered of 4.4 million (i.e. about 23 per cent).¹ In wholesale trade the samples consist of 9 per cent of total wholesale trade, in terms of turnover, and in retail trade of about 2 per cent. Co-operation on the part of the collaborating firms is good—the replies, with the exclusion of those arriving too late, regularly amount to about 80 per cent of the number of questionnaires issued for industry and for wholesale trade, and to about 70 per cent for retail trade.

Separate forms of questionnaire are issued for industry and for wholesale and retail trade. They are due to be completed and returned within four days after the end of each month. The *Konjunkturspiegel* are sent out within ten days after the end of the month. The regular questions for industry deal with turnover, production, stocks of raw materials and finished goods, new incoming orders, the size of order books, and the selling price of products. For wholesale and retail

trade the questions are similar, though more emphasis is naturally placed on turnover and stocks. The most recent forms of questionnaire for industry and for trade are set out in Appendix I.

They have been modified from time to time in the light of experience. Important changes were introduced into the questionnaire for industry at the beginning of 1955. Then, for the first time, firms were asked to make a comparison (of turnover) with the same month of the previous year. The questions relating to forthcoming months were also revised. Whereas previously firms were asked to look two months ahead in dealing with the future on the more important issues (production, stocks, order books, and selling prices), they are now asked to commit themselves either for the next month only (in the case of production and selling prices) or for the next six months (in the case of selling prices and the general outlook (*Geschäftsentwicklung*) in their line of business).

The questionnaires for wholesale and retail trade were also revised at the same time. On account of the strong seasonal movements in trade a comparison of turnover with the same month of the previous year had already been introduced in January 1954, but in January 1955 such comparison was extended to orders and stocks. As to the future, traders are now asked to look three (instead of two) months ahead; and they are asked to compare those three months with the same months of the previous year.

To each question there are only three possible answers, and no guidance is given as to the limits beyond which a slight change means "higher" or "lower" rather than "the same".

Separate answers are given for each commodity, of which there are about 300, grouped into 57 branches of industry and trade. The results for each commodity are shown separately, grouped by branches on separate *Spiegel*. A summary *Konjunkturspiegel* is issued for industry, for retail trade, and for wholesale trade, showing the aggregated results for each branch. No figures are shown, but the weighted percentage distribution of firms replying in each of the three ways is indicated by rectangular blocks in three different colours. Across the block a few words of description, giving the general tendency, are printed. The combination of colours and text enables the situation for any commodity or for any branch to be quickly read.

The weighting of firms in order to obtain the percentage distribution of answers for a commodity

¹ There is, however, considerable dispersion about this average. For some branches, in which there are few firms, there is a 100 per cent sample, while for others it is as low as 10 per cent. On the whole the sample is considered reasonably satisfactory, whatever its size in particular branches.

was done on the basis of employment in the previous year for industry, but recourse is increasingly being had to other suitable weights that are available, such as the number of spindles and looms for textile products. In the case of trade, firms are weighted by turnover in the previous year. To aggregate the results for individual commodities into results for a branch, weights are derived from independently obtained data on gross output. Besides data for each branch, the Institute also work out by similar methods weighted results for retail trade as a whole (with and without food) and for wholesale trade in consumer goods as a whole. In the same way they calculate results for the whole of industry, with sub-divisions into investment and consumer goods,¹ using as weights such appropriate measures as net output, turnover and exports.

Each collaborating firm receives, free of charge, the sheet relating to its own branch. It can also receive, upon payment, other sheets of interest. The *Konjunkturspiegel* are sent out also to members of the IFO Institute (membership entailing payment of an annual fee). They are issued on a strictly personal and confidential basis, in accordance with the undertaking which secures the co-operation of the collaborating firms. A few days after the *Konjunkturspiegel* are issued, i.e., about the middle of the month, the broad indications emerging from them are published in the next number of *Schnelldienst* (a weekly periodical of the Institute). These are supported by tables, presenting selected data. The selection, which avoids any uniform pattern month by month, is made with an eye to items of particular significance or interest. Its character is illustrated by the following items which have been singled out in recent months for treatment in *Schnelldienst*, in addition to regular reviews of the salient features of the month's *Konjunkturspiegel*:

January — The demand position in the various sections of the textile and shoe industries.

February — The distribution of replies to some questions, distinguishing investment and consumer goods. Orders and turnover in the timber and paper-using industries. Price developments in three investment-goods industries. Order books in the various sections of the textile and shoe industries. Changes in wholesale trade turnover by branches

between December and January in recent years.

- March — Price developments for investment goods, consumer goods, and raw materials. Order books in separate branches of retail trade in January and February of the last three years.
- April — Actual movements compared with normal seasonal movements in the investment-goods and consumer-goods industries. Selling prices in industry by four main sectors.
- May — Stocks of industrial products and raw materials. Retail trade turnover by branches.
- June — Turnover in the investment-goods industries. Order books for various kinds of machinery and for selected consumer-goods industries, with special reference to textiles and clothing.
- July — Order books for the investment- and consumer-goods industries. Expectations for the business situation in the next six months for consumer-goods industries, with special reference to textiles, and for machinery-producing firms.
- August — Turnover in nine consumer-goods industries. Order books for investment goods.

Three examples of the method of presentation in tabular form used in *Schnelldienst* have been selected by way of illustration and are reproduced in Appendix II.

The Konjunkturtest of the Oesterreichisches Institut für Wirtschaftsforschung

Started early in 1953, the Austrian business survey was originally confined to a monthly investigation of industry, but it now covers wholesale and retail trade as well. It began with a sample of 300 firms. Now it deals with about 1,500 in industry, 450 in wholesale trade and 750 in retail trade. The main sections of industry excluded are the production of basic materials and paper production (the latter is a highly cartelized industry). In the fields of industry covered by the survey the sample is a large one, comprising about 80 per cent of the total. About 90 per cent of the collaborating industrial firms send in replies each

¹ Since January 1954 these have no longer appeared in the *Konjunkturspiegel*, but are published from time to time in *Schnelldienst*.

month, while in trade the proportion is about 75 to 80 per cent.

The survey conforms closely to the IFO model, both in the way in which it is carried out and in the information sought. But industrial firms are asked additional questions about employment and hours worked; they are also asked about payments received; wholesale firms are asked about outstanding claims; and since July 1954 wholesale and retail traders have been asked about branches as a whole and not about individual commodities.

A major departure from the IFO concept is, however, entailed in an alternative formulation of the question about daily production (and in the same way of the question about incoming orders) in industrial firms. They are asked to state whether the change in daily production compared with that of the previous month is greater or less than 1, 5, 10, 15, 20, 25, 30 or 40 per cent. The firms are given the option of simply answering "up", "unchanged" or "down" but only ten per cent take the easy course. It is believed in the Institute that a firm can usually select the right bracket without having to resort to elaborate records. The results are used by the Austrian Institute to obtain approximate, but very up-to-date, indices of production for the various branches.

The same question, requiring the change in production to be assessed within definite quantitative limits, is also put in terms of a comparison with the same month of the previous year (the conventional IFO form of question being again allowed as an easy option).¹ The question, although designed to avoid seasonal influences, does not seem to be altogether successful; and the results are used primarily for purposes of checking.

The approximate indices of production derived from the answers to the question about production relate to the daily rate of activity. Holidays and other reasons for complete stoppage have to be allowed for in comparing these indices with the official indices of the conventional character which become available later. Such a comparison is being made in the Institute. The results are not yet complete, but it appears that the indices derived from the survey are reasonably reliable as indications of the trend rather than of deviations from the trend, which business men are inclined to under-estimate so long as they rely on judgment rather than accurate computation.

¹ The IFO questionnaire itself presents this comparison in relation to turnover rather than output. But it is not altogether clear how far manufacturing firms succeed in distinguishing between turnover and output when making a comparison with a year ago.

Another deviation in Austria from the strict letter of the IFO non-quantitative principle takes the form of a question addressed to wholesalers and retailers, who are asked to give, for each branch, a precise figure for the percentage change in their turnover. This they can easily do because they have to keep such monthly statistics for the purposes of the turnover tax.

Finally, it is felt that firms cannot be expected to look so far ahead as six months, and the Austrian Institute do not therefore enquire further than into the immediate expectations and intentions for the forthcoming month.

The main results of the survey are presented in *Konjunkturspiegel* like those of the IFO Institute, but for reasons of economy the results are largely presented in actual percentage figures, only the summary sheets comprising coloured rectangles. On the back of the sheet for each branch is a textual comment, which includes the approximate index of production (and corresponding percentage changes for incoming orders). To the summary *Spiegel* for retail trade is annexed a sheet giving the percentage change in turnover in each branch.

Weighting is carried out in the same manner as in the IFO enquiry, and (in the absence of information about net output) adjusted values of gross output are used as weights for obtaining aggregated results for branches. No attempt is made to build up aggregated results for production or trade as a whole.

Besides distribution to collaborating firms, the monthly results are sent out to a certain number of persons associated with the Institute, for their confidential and personal information. In no sense are they generally available. The only part which is ever revealed in published form consists of occasional general references under particular headings in the review of economic conditions which is published in the Institute's *Monatsberichte*. It is felt in the Institute that more widespread dissemination of the results might prejudice the co-operation of the firms.

By way of illustration the *Konjunkturspiegel* for the food and drink industry for May 1955 is reproduced in Appendix III.

The Swedish Business Barometers

The first Swedish business survey based on the IFO model was carried out by the Konjunkturinstitut (an independent government research institute) in the autumn of 1954 and has been continued at quarterly intervals since. It began with the textile industry. Since March 1955 the engineering industries have also been surveyed (with the exception of shipbuilding and repair workshops). Other sections of industry and trade may be covered in due course.

The collaborating firms—a smaller percentage sample than in Austria and the Netherlands—have been selected on the basis of a stratified random sample, the stratification being by three sizes of firm (large, medium and small). The sampling fractions used vary according to the size of firms, the largest fraction being applied to the group of large firms, and small firms being represented by only a relatively small sample. For textiles the sample covers 48 per cent of all firms with more than 25 workers (in terms of employment the coverage is 75 per cent), but only one-third of the medium-sized firms (in terms both of employment and of number of firms). For engineering 54 per cent of firms with more than 25 employed (88 per cent in terms of employment) are included in the sample, but the smaller firms (25 to 50 workers) are represented only to the extent of 25 per cent. In general the percentage of usable answers is higher for the larger firms than for the smaller ones. For textiles about 90 per cent and for engineering close to 85 per cent of the firms send in usable replies.

A special questionnaire is prepared for each industry (but so far there have been only small variations in the number and kind of questions which are put). The questions, which are more numerous than in the cases of Austria and Germany, are as follows:

- (1) Production; new orders (home and export); selling prices (home and export); degree of competition; total cloth purchased and the proportion purchased abroad (textiles only) or raw material purchased; orders placed for machinery and equipment; number of lines manufactured (textiles only); profitability (comparison between half years for engineering).
- (2) Workers employed; capacity utilization (textiles only); stocks of finished goods; stocks of raw materials.
- (3) Profitability (textiles only); liquidity (of the firm, for textiles also of customers); stocks of finished goods and of raw materials; labour shortage.

The questions grouped under (1) require for engineering a comparison of the quarter under review with the previous quarter and of the expected situation in the forthcoming quarter with the quarter under review, while for textiles the same quarters have to be compared with the corresponding quarters of the previous year; questions under (2) require for engineering a comparison of the end of the quarter under review with the end of the previous quarter and of the expected situation at the end of the forthcoming quarter with the end of the quarter under review, while for textiles the same dates have to be compared with the corresponding dates of the previous year; and under (3) the questions are put in terms of "good", "satisfactory" or "unsatisfactory", and do not involve any comparison between points of time.

Except for the question whether the firm is experiencing a labour shortage, where a "yes" or "no" is required, all questions provide on the usual IFO basis for a choice of three answers, without any indication being given as to the quantitative limits of "no change".

Each sector of industry is broken up into branches. For textiles there are thirteen sub-groups, and for engineering three, but in the latter case a special breakdown into nine commodity groups is made. Some questions (for example those relating to liquidity, orders for machinery and employment) are directed to all the branches of a firm's activity and one single answer is required, without breakdown by branches.

For textiles, firms are asked to give their views on the probable state of business three months hence not only for themselves but also for the textile industries as a whole, a half-way house to the French I.N.S.E.E. practice of asking industrialists their views on the economy in general. (It seems that textile firms tend to be slightly more optimistic about their own outlook than about the sector in general; in the most recent enquiry, 16 per cent of clothing firms, for example, expected to do better business in the next quarter, but only 9 per cent thought that business would improve all round.)

Within each of the three sub-samples of firms individual results are weighted by the value of each firm's output (at present, 1954 output for textiles, and 1953 output for engineering) but for questions relating to exports the value of exports is used, as estimated from the approximate ratio of each firm's exports to its total output. Information on output is derived from regular annual industrial statistics and on the ratio of exports from a question put to the engineering firms once a year. The additional weights applied to each sub-sample, in accordance with the stratification procedure described earlier in this article, are based on the employment separately provided by the three groups of firms.

The tabulated results, known as barometers, showing the actual percentages replying in different ways to each question, are sent out to the collaborating firms within three weeks. A covering note gives a summary of the results and where appropriate a comparison with the results of previous surveys. The results of the first textile survey were published with comments in the autumn of 1954 in the Institute's half-yearly review of the economic situation.¹ In the same way the results of the first engineering survey were published in the spring of 1955, but they con-

¹ *Meddelanden från Konjunkturinstitutet*, Series A, No. 26.

tained only brief mention of and limited detail about the second and third textile surveys. In addition, the Institute have issued press releases which have given a certain amount of comment and information on each survey. Publication will present increasing practical difficulties as the scope of the surveys is widened, and no final decision appears to have been reached.

The Business Surveys of the Belgian National Bank

Monthly surveys of the textile industry and of trade in textiles were started in the autumn of 1954 by the Belgian National Bank, at the request of a joint committee of employers' and workers' representatives, and it is intended in due course to extend them to other sectors. They are conducted along much the same lines as those of the IFO Institute. But in addition to the questionnaire for industry, there are two versions for wholesale trade (one for raw materials and one for finished goods) and two for retail trade (one for large and one for small firms), and there is a sixth for importers. Replies have to be sent in by the first day of the month following the month under review, and the results are available to collaborating firms within ten days.

The response on the part of firms has been very satisfactory, and an increasing number are taking part. In sectors in which the number of firms is fairly small the sample is usually one of about 70 per cent and in some sectors is as good as 90 per cent. But it is much smaller in sectors in which there are many firms. In retail trade nearly all the large firms collaborate but only 2 per cent of the small ones, and the stratification procedure already described is applied to take account of this difference. In all about 3,000 textile firms are included—1,800 in industry and 1,200 in distribution—and information is sought on 79 products.

The following questions are put:

Industry :

(1) production; home deliveries; export deliveries; stocks of the finished product; home and export selling prices; raw materials purchased; suppliers' credit terms; raw material stocks; new home and export orders; order books.

(2) production; employment; selling prices.

Wholesale trade :

(1) home and export sales; home and export selling prices; purchase prices (home and import); orders placed at home and abroad; suppliers' credit terms; stocks of goods traded.

(2) orders placed by the firm; purchase prices.

(3) sales.

Retail trade :

(1) sales; selling prices; purchase prices; stocks of goods traded; orders placed by the firm.

(2) purchase prices; orders placed by the firm.

(3) sales.

Import trade :

(1) orders placed abroad; purchase prices; orders placed by home customers; orders placed by foreign customers; delivery periods; stocks.

(2) orders placed by home customers; world market for the commodity.

The questions asked under (1) relate the month under review to the previous one; those under (2) deal with the outlook for the next month¹ compared with the month under review; under (3) (wholesale and retail trade) comparison with the same month of the previous year is invited. In each case, industrialists are asked to state whether the change in production is seasonal or not, and a similar question is put to traders about changes in orders. Industrialists are also asked to state whether their stocks of the finished products and their order books are more or less than normal for the season, and traders to give the same information concerning their sales and stocks. Both industrialists and wholesalers are asked once a year to point out which months of the year represent seasonal highs or lows in production or sales, as the case may be. Firms are asked to bear in mind that even slight changes should be reported, since a persistent sequence of small changes could constitute a distinct trend; firms which report no change for several successive months are asked to confirm their statements.

Weighting is based on the firms' sales of the product under review.² Results are aggregated for the major classes of textiles but not for textiles as a whole.

The results are put into coloured form, on much the same lines as the IFO *Konjunkturspiegel*. Each collaborating firm receives free of charge those concerning his own field. It can also obtain the results for other stages of the same product—for example, a manufacturer of cotton textiles can secure the results for wholesale and retail trade in cotton textiles. There is no distribution of the results except to the collaborating firms, and secrecy is guaranteed.

The success of the textile survey has encouraged the committee of employers' and workers' representatives to invite the National Bank to start organizing surveys for the leather and shoe industries and for the metal-using industries. Later on chemicals will be tackled. It is hoped in due course to cover all essential fields of industry and the main corresponding sectors of wholesale and retail trade.

¹ In the case of importers the outlook in the next *three* months is asked for.

² Total sales, domestic sales, or exports, according to the nature of the particular question.

The Business Surveys of the Netherlands Central Bureau of Statistics

In agreement with the appropriate trade associations, monthly surveys on IFO lines were started early in 1954 by the Netherlands Central Bureau of Statistics for the shoe and shoe-leather industries. Preparations are being made to cover the textile industries and it is intended ultimately to bring in all important branches of industry and trade.

About 70 per cent of leather production for shoes is covered by the firms included in the sample, but only 55 per cent of shoe-making firms. The samples are thought to be representative, and the rate of response is virtually 100 per cent.

Like the Swedish Institute, the Netherlands Bureau of Statistics adapt the form of questionnaire to meet the particular needs of each industry. The questions relate to the following subjects:

- (1) Number of workers; average hours per worker; market (buying) prices for various raw materials; stocks of unsold finished goods; production per working day; new home and foreign orders; orders on hand; selling prices.
- (2) Number of workers; average hours per worker; production per working day; stocks of unsold finished goods; orders on hand; selling prices.

Questions under (1) involve comparisons with the previous month and those under (2) the outlook for the next month. Two additional questions are put to the leather industry—one on actual and expected daily consumption of raw materials and one on actual and expected stocks of goods in process. These two questions are put because of the length of the production process for leather and it is not intended to ask them generally. There is no attempt at obtaining comparisons with the corresponding period of the previous year or at taking account by any other means of seasonal factors.

The questionnaires are to be sent in by the firms by the 29th of the month under review. Reminders are issued by telephone. The results are available about a week after the end of the month under review and are presented in a form similar to the IFO *Konjunkturspiegel*. The weighting of individual firms varies between one question and another.¹

¹ The necessary data are available from regular statistical sources. The weights used for the answers of individual firms are the value of leather consumption for the purchase price of leather, average annual stocks for stocks, average value of exports for export orders, and number of employees for all other answers. An investigation made by the Netherlands Central Bureau of Statistics indicates that if all the answers were weighted by the number of employees, it would make little difference for purchase prices, some difference for stocks, and a significant difference for export orders.

For the present the results are kept strictly confidential and are sent only to collaborating firms. They include a certain amount of textual comment, such as cannot be revealed in the pictorial averages. For example, the Bureau break down shoe manufacturers into those producing mainly men's shoes, mainly women's shoes, and mixed enterprises. A further distinction is made between cheap, average and expensive shoes. When the results for these sub-sections are significantly different from the general movement they are commented on in the text.

The Perspectives économiques d'après les chefs d'entreprises of the French Institut national de la statistique et des études économiques

The Institut national de la statistique et des études économiques is the French government statistical office. It made its first business survey in the spring of 1951, and has continued at half-yearly intervals. Originally it was intended to investigate exclusively business men's views on prospects for the forthcoming six months. The survey still mainly serves that purpose, but information concerning recent trends is also now asked for.

The questionnaire is due to be completed by the middle of May and November of each year, but reminders are sent out and in practice two weeks' grace is allowed. Separate questionnaires are issued for industry, and for wholesale and retail trade.²

The question of the sample has presented considerable difficulty. The selection of firms was made in the first place from the various trade directories and yearbooks, containing the names and addresses of managing directors. In this way all the large firms were traced. Two-thirds of them had Paris addresses, but often no more than a head office was situated there. Some branches of industry and trade are comprised mainly of small firms. In an attempt to correct for this bias and to secure a better geographical spread, efforts were made to add more provincial firms to the list, the various provinces being represented roughly in relation to their industrial importance. The selection was made with the help of regional offices of the Institute, working in close co-operation with trade federations and chambers of commerce, and it seems probable that some regard has been paid to the likelihood of co-operation.

Fifty-one per cent of the firms in the initial sample employed between 100 and 1,000 workers, 23 per cent

² Nationalized industries are not covered. Transport, building and public works have been omitted since 1952. Since then building has once been the subject of a special questionnaire. Agriculture and the hotel trade are now regularly dealt with by separate questionnaires. These are not discussed in the text.

between 20 and 100, and only 7 per cent less than 20. By the middle of 1955 the proportion of firms with less than 100 employees had fallen to 26 per cent for industry. On the whole the enquiry has to be regarded as very adequately covering the very large firms, the medium ones not so well, and the small firms quite inadequately.

The sample has now risen to almost 4,000 (in May 1955 there were 2,675 firms in industry and 1,177 in trade, 900 retail and wholesale traders having been recently added).

A further factor affecting the reliability of the sample is the poor rate of response, which usually lies between 50 and 60 per cent. This is in spite of the fact that firms which persistently decline to co-operate are replaced by others, though persistent failure is not common. The reasons why co-operation is disappointing are not altogether clear. Anonymity is available to those who want it, but less than 5 per cent take advantage of the offer. One possible reason why firms are on the whole less co-operative than elsewhere is that in France the firm gains no advantage from collaboration, the results of the survey being published for all and sundry to read and benefit from. It is possible also that there is in France a certain indifference among business men about the importance of helping to supply economic information.

Another reason may lie in the emphasis placed on the questions about the outlook for the economy as a whole, which many business men must doubt their competence to judge. It is true that the answers to these general questions can be left blank, and in fact they often are. In the middle of 1954 they were transferred from the beginning to the end of the form of questionnaire. The proportion of blank answers to the general questions has risen since then from 5 per cent to 30 per cent (of the 50 to 60 per cent who returned the questionnaire at all),¹ and it may be hoped that the general questions now exercise a less discouraging effect on completion of the remainder of the questionnaire.

The questionnaires used in the survey conducted in May 1955 are summarized in Appendix IV. Certain major differences from the IFO and similar surveys stand out. Firstly, questions are asked about prospects for the economy in general as well as about the firm's own business. A second difference from the IFO procedure, which has arisen only recently, is that the answers to some of the questions, in-

cluding the important ones, now have to be selected from five rather than from three possibilities. The I.N.S.E.E. do not, however, give quantitative guidance as to the ranges intended to be covered by the various possible answers, except for the general questions about the economy as a whole, which the IFO Institute do not in fact ask. This, in contradistinction to the increase in the number of possible answers, represents a recent move in the direction of the IFO model; for in earlier enquiries quantitative indications were given for the answers to nearly all the questions. Where they are given they vary in range as between one question and another, and a comparison of successive enquiries indicates that the choice of range is still a matter of experiment.

The main difference from the IFO method lies, of course, in the fact that the survey is conducted only twice a year and not monthly. The emphasis is on comparison with the corresponding period of the previous year rather than on the immediately preceding period.² This is an advantage in that seasonal fluctuations are allowed for, but a disadvantage in that no link is provided between the first and second halves of the year, as would be necessary for the appreciation of a trend on a continuous basis.

A simpler and possibly a more satisfactory method of dealing with seasonal fluctuations takes the form of a different, and more general, question about the general trend of the firm's business in the previous three months (i.e., whether it has expanded, remained unchanged or contracted), *after allowance has been made for seasonal variations*.

Another difference from the IFO method is that the I.N.S.E.E. survey deals principally with the main sectors. There is a certain amount of detail by sub-groups, but nothing for individual commodities. (Only about one-third of the firms provide a breakdown by sub-groups.)

For weighting the answers, the turnover of the individual firm is used. But for the questions about prospective employment in the French economy as a whole the labour force is used. The answers to the questions about factors limiting activity are not weighted.

Furthermore, unlike the IFO survey, the results are published for all to see in full and benefit from. Their publication is somewhat held up by stragglers among the collaborating firms. They first appear in

¹ Failure to answer the general questions was more marked for the smaller firms. In the case of industry the proportion varied progressively on a recent occasion from 27 per cent for the very large firms (over 1,000 persons engaged) to 38 per cent for the smaller firms (under 100 persons).

² This represents a modification. At an earlier stage firms had been asked to make comparisons of the past quarter with the preceding quarter. The difficulty, referred to earlier, of making comparisons with the corresponding period of the previous year without actual computation from a firm's records is aggravated in France by the fact that one of five and not merely of three possible answers has to be selected.

the Institute's monthly *Conjoncture et Mouvement des Affaires*,¹ the relevant issues of which are sent free of charge to the collaborating firms (whether or not they filled in the questionnaire for the period). Final results, which take into account some late returns, are published a couple of months later in the Institute's monthly *Etudes et Conjoncture*.² This later presentation includes rather more descriptive comment and detail. In both cases reliance is placed mainly on tables showing the percentage distribution of answers (together sometimes with a column giving the (weighted) percentage of firms sampled which did not reply to the question). Emphasis in the later publication is on the subject (production, orders, etc.), with a breakdown by industrial groups, whereas in the earlier one each industrial group is dealt with separately, with a breakdown by subject and with some detail on commodity groups. The earlier publication includes a rather fuller account of the results relating to wholesale and retail trade.

An analysis is made of the answers to some questions by regions (though a provincial firm may often be counted in the Paris area just because it has a head office there).³ The answers to some questions are also analysed by size of firm.⁴

By way of illustration the results are reproduced in Appendix V for order books in industry (taken from *Etudes et Conjoncture*, August 1955), and for the position from all points of view in textiles (taken from *Conjoncture et Mouvement des Affaires*, May-June 1955).

*The Business Surveys of the Luxembourg Statistical Office*⁵

The surveys carried out every quarter in Luxembourg since 1953 closely resemble those of the French I.N.S.E.E. The total number of firms in the country is small, and it has been possible to obtain a fairly complete sample of 130 firms. On the whole the firms which are not included are very small ones, with 5 to 10 workers. The survey is highly approved of by

industry and 95 per cent of the firms in the sample usually reply to the questionnaire, which has to be sent in by the close of the quarter under review. As in the case of France, industrialists are asked their views on production and on industrial employment for the economy as a whole, though only three months ahead: only a little more than half the firms, however, reply to these two questions.

The questions regularly put deal with:

- (1) Production; incoming orders (distinguishing home orders, orders from Belgium, and other); labour force and hours worked per week; raw material supplies; stocks of finished goods; input prices; selling prices.
- (2) Production; order books; exports (to Belgium and other); labour force and hours worked; raw material supplies; labour costs; selling prices; factors likely to limit activity.
- (3) Foreign competition.
- (4) Industrial production; industrial employment.

Questions under (1) refer to the past three months and those under (2) to the next three. In each case comparison is both with the preceding quarter and with the corresponding quarter of the previous year. Question (3), on foreign competition, seeks to identify its origin and to determine whether it is growing or lessening. The two questions under (4) relate to the economy as a whole (the comparison being with the preceding quarter).

Unlike the I.N.S.E.E., the Luxembourg Statistical Office normally make provision for three answers only (five are provided for the two questions on the economy as a whole, and, as with the I.N.S.E.E. survey, for these two questions percentage ranges are indicated). It is interesting to note that whereas in France, after the experience of a few initial surveys, there has been a switch from three questions to five, in Luxembourg, after one trial, there has been a fairly complete switch in the opposite direction. (In the use of quantitative indications for the choice of answer the shift has been the same in both countries.)

All the questions relate to the entire range of activity of the firm, and there is no breakdown by sub-group or commodity. The answers on the economy as a whole are not weighted, on the grounds that a small firm's view is worth as much as that of a big one.

The results have been published every quarter, about six to eight weeks after the questionnaires have been returned, in a special publication of the Statistical Office devoted to that purpose and entitled *Les perspectives économiques au Grand-Duché de Luxembourg pour le ... trimestre ... d'après les chefs d'entreprise*. Presentation is in tabular form, similar to that of the I.N.S.E.E. survey.

¹ E.g., in the issues for November and December 1954 and for May-June 1955.

² E.g., in the issues for March and for August 1955.

³ Many steel firms have head offices in Paris. As an experiment the I.N.S.E.E. once sent out questionnaires to steel-making establishments, but they were usually returned with an indication that the questions should be put to the Paris head office, which should be better able to reply.

⁴ The establishment of regional differences, and of differences according to size of firms, underlines the error which is introduced as a result of the sample being proportionately larger for some regions than for others, and for large firms than for small ones.

⁵ It is understood that these are to be discontinued on account of shortage of staff.

The results are classified both by industry, according to subject, and by subject, according to industry. A few words of text under the tables summarize the general picture.

The Economic Outlook according to the Société d'expertise comptable fiduciaire de la France

The Société d'expertise comptable fiduciaire de la France are a body which, through the accounting services which they render to their clients, fulfil the functions of chartered accountants. In addition, they conduct an annual investigation of their clients' experience in their businesses and their expectations for the forthcoming year. It thus resembles the Dun and Bradstreet Survey in the United States. The Society's clients are mainly medium-sized firms, and to some extent the enquiry can be regarded as complementary to that undertaken by the I.N.S.E.E. It is not made by direct questionnaire. Instead, investigators hold interviews in the normal course of their work of visiting firms, and themselves fill up and return questionnaires, based on the conclusions which emerge from the interviews. Before the enquiry takes place the interviewers are "briefed" by a written explanatory note.

The list of questions investigated by the interviewer varies from year to year, but is the same for industry and for wholesale and retail trade. The enquiry undertaken in September 1955 covered the following main subjects: the general level of activity, turnover and profits; information on the nature of suppliers and of customers; capacity utilization, investment, rates of wages and salaries. There are also some special questions covering the nature of the difficulties experienced in the past year and those expected in the coming year. In addition to these questions concerning the firm, an attempt has been made to classify other answers by type of product rather than by firm, so as to obtain answers from more homogeneous groups. These cover: orders placed and received; stocks of raw materials and finished goods; prices and margins; supply and delivery delays; and the length of credit granted and received.

In the first surveys the results of the previous year were to be described as either below normal, normal, or above normal, without explicit reference to any other particular year, and the expectations for the following year¹ as lower, unchanged or higher. In the latest survey, the past year's experience is to be compared with that of the previous year, and the

¹ Should such a long period prove impracticable in particular circumstances, forecasts may be made for six months, three months, or less.

coming year's expectations with the experience of the current year. A choice of five instead of three answers is now offered: no change, between five and fifteen per cent, and more than fifteen per cent, less or more, than the year with which comparison is to be made.

The current survey is the fourth in the series. So far the surveys have been carried out at annual intervals, but it is hoped to make enquiries on orders, sales and stocks more frequently (quarterly or even monthly) if there is a favourable response to a question on this point in the current survey. The results of the enquiry are put together in a document entitled *Prévisions économiques de notre clientèle*, which is sent out to the Society's clients. The document is not publicly on sale, but is made available to certain organizations and individuals who have an interest in following the French economy. It presents the results both in graphic and in tabular form, and includes a great deal of comment based on observations made by the business men during the interviews. Particularly valuable are indications of variations for the same industry in different regions (the Society's clients are well distributed all over the country).

Though average results for an industry are not usually given, there is a more detailed breakdown by sub-groups than is available from the I.N.S.E.E. surveys. Because of differences in classification, comparison is difficult to make, but where it is possible (e.g., in the case of some sectors of the metal industries) the results compare well with those obtained by the I.N.S.E.E.

*The Forecasts for the Italian Economy, according to the Survey of Mondo Economico*²

Since July 1952 *Mondo Economico*, the weekly journal of the Istituto per gli Studi di Economia (Milan), has been carrying out an enquiry every six months (at the end of each half-year) into expectations for the coming six months. Unlike any of the surveys so far described, the *Mondo Economico* survey is concerned with the opinions not only of firms but also of knowledgeable people in other fields, such as bank managers or economists, who are in a position to give a considered judgment on trends in the economy. The persons questioned number about 750 and are distributed over the various fields roughly in the following proportions:

² This survey does not fit into a strict definition of the subject matter here dealt with. The questions are concerned purely with prospects—and not even with prospects in the particular line of business of the person giving the answer. It is more closely related in nature to the United States surveys mentioned in an earlier footnote.

Industry and agriculture:	45 per cent
Commerce and Chambers of Commerce:	25 per cent
Banking, financial and credit institutions:	20 per cent
Economists and experts:	10 per cent

The geographical distribution is thought to be good. The rate of response is still less than 40 per cent, and there is undue reliance on a hard core of "regulars".

Questions are asked only about the economy in general and not about specific sectors, and the resulting opinion is supposed to represent a kind of average national view of persons competent to judge from their own broad contacts and experience.

Seven questions are asked:

- (1) "We are sure that because of your direct experience you have an opinion on the development of the general economic situation in our country. Please say what will in your view be the probable trend of business activity."
- (2) "In the light of your judgment on the general business situation, what trend do you forecast for the demand for durable consumer goods (furniture, cars, domestic apparatus, etc) and non-durable consumer goods (food, clothing, luxury articles, etc.)?"
- (3) "What, in your view, will be the demand from industry as a whole for producer goods for building new plant or for equipment?"
- (4) "What do you think will be the probable trend for exports, bearing in mind the prospects for international economic relations?"
- (5) "What trend do you forecast for wholesale prices?"
- (6) "What trend do you forecast for retail prices?"
- (7) "What is your view on the probable movement on the stock-exchange of prices of shares?"

All the questions, except the last, provide for five possible answers (with the further possibility of refusal to make a forecast), and percentage ranges are indicated, varying according to the question. In all cases comparison is invited only with the preceding six months.

For obvious reasons there is no weighting of the answers. The results of the enquiry are published within a month as a supplement to *Mondo Economico*, giving in pictorial form the distribution of answers between the five possibilities so as to indicate the actual percentages and the proportion of "don't-knows". The forecasts given for the two preceding periods are also shown, for purposes of comparison. The following table indicates the forecasts made for the general trend of business activity in the second half of 1955, published in the Supplement to *Mondo Economico* of 9 July 1955:

Percentage distribution of answers

Big expansion (more than 10 per cent) .	3.30
Moderate expansion (5-10 per cent) . .	46.16
No change (between +5 and -5 per cent)	34.06
Moderate contraction (5-10 per cent) . .	9.52
Big contraction (more than 10 per cent)	1.84
Don't know	5.12
	<hr/> 100.00

The forecasts in the two preceding surveys reproduced for purposes of comparison differed little from this distribution.

There is considerable textual comment, which draws on the observations made in individual answers. Some indication is given of the distribution of answers according to the four kinds of persons approached, but it would be interesting if this were done more systematically.

The Surveys of the Italian Economy reproduced in Sintesi Economica

Although they were started several years earlier, the surveys made by the Italian Union of Chambers of Commerce provide a complement to those of *Mondo Economico*. Whereas the latter deal with expectations for the future, the former concentrate largely on the recent past, but since 1952 have included questions about prospects. A primary purpose is to provide information on subjects for which statistics are inadequate or deficient in Italy, and in particular to provide this information by provinces—a matter of some importance in a country with such regional diversity. In order to achieve this double purpose, the Union works through its affiliated Chambers of Commerce in each of the ninety-two provinces. On the basis of reports coming into them, the provincial Chambers of Commerce send in statements to the head office, which uses them to obtain a general picture. The final results are reproduced in the Union's monthly journal, mainly devoted to this purpose and entitled *Sintesi Economica*. The reports of the provincial Chambers themselves are based on information obtained from business men, bank managers and others, which is considered by a committee in each province capable of exercising discretion in interpretation. There is much textual comment, which draws largely on statements made by individual Chambers of Commerce. The survey covers a rather wider field than is usual. In brief, the classification is as follows:

Agriculture: fertilizers; state of crops; labour supply; productivity; relations with employers.

Livestock: feed; fodder; state of health; numbers.

Industry : electric power; solid and liquid fuels; activity; stocks of products; home and foreign orders; production costs; labour productivity; relations with employers.

Tourism and transport : availability of railway transport; road transport and fuel; the trend of freights.

Trade : retail sales in general; special sales (hire purchase, non-commercial and illegal, extraordinary); stocks; turnover.

Credit : trend of deposits; requests for loans; cost of borrowing.

Electric power: sufficient.

Solid and liquid fuels: sufficient.

Activity: fair.

Stocks of industrial products: normal.

New orders { home: unchanged.
foreign: unchanged.

Production costs: unchanged.

Labour productivity: good.

Labour relations: good.

On the basis of the classification, the prevalent trend is indicated for each province, the month under review being either compared with the preceding month or described in such terms as the following : abundant, sufficient, or scarce for the availability of resources; good, fair or bad for productivity; good, fair, poor or critical for industrial activity. The presentation by provinces includes nothing about prospects.

But a national picture also is presented for industry, for wholesale trade, and for retail trade, with breakdowns by branches. This includes in addition indications of prospects for production and for sales in the coming three months.

The problem of weighting the answers has presented considerable difficulties, and a final solution does not appear yet to have been reached.

By way of illustration, the results published for February 1955 (in the April issue) for industry in Milan were as follows:

As an example of the 18 selected industries for which national averages are presented, the shoe industry may serve. The results for March 1955 (also from the April issue) are as follows:

Energy: adequate.

Orders on hand: low.

Production: unchanged.

Stocks of industrial products: normal.

New orders { home: unchanged (-).
foreign: unchanged (-).

Production costs: unchanged.

Labour relations: good.

Prospects for production in the next three months: slight rise.

(+) indicates "with a slight tendency to rise".

(-) indicates "with a slight tendency to fall".

In the case of prospects, continuous underlining (——) indicates an improvement compared with the forecast made in the previous month, and dotted underlining (.....) a deterioration. The absence of underlining indicates the same forecast as in the previous month.

APPENDIX I

IFO Questionnaire for July 1955 (Western Germany)

Commodity XY

INDUSTRY

I. *Assessment of the Business Situation in July 1955*

- (1) Our turnover in XY, compared with July 1954, is higher/about the same/lower.
- (2) We consider that our turnover in XY is at present good/satisfactory (alternatively, usual for the season)/very bad.

II. *Developments in July 1955 compared with June 1955*

- (1) Our daily production of XY has gone up/remained the same/gone down.
- (2) Our stocks of materials for XY are too big/adequate/too small.
- (3) (a) Our stocks of unsold finished produce of XY increased/were unchanged/decreased. (We had no stocks in the two months under review.)
(b) Our stocks of finished produce of XY were too big/adequate/too small.
- (4) Incoming orders (home and abroad) for XY rose/remained the same/fell.
- (5) Incoming orders from abroad for XY rose/remained the same/fell. (We received no foreign orders in the two months under review.)
- (6) (a) Our order book for XY lengthened/remained the same/shortened.
(b) We consider that at present our order book for XY is relatively big (e.g. long delivery dates)/normal (alternatively, usual for the season)/too small.
- (7) Our domestic selling prices for XY were raised/were unchanged/were lowered.

III. *Short-term Expectations for August 1955*

- (1) We shall raise/leave unchanged/reduce our production of XY.
- (2) We expect that our domestic selling prices for XY will be raised/remain the same/be lowered.

IV. *Long-term Expectations (from September)*

- (1) We expect that in the course of the next six months our domestic selling prices for XY will rise/stay about the same/fall.
- (2) In the next six months (alternatively, the next season) the business situation with respect to XY will probably become more favourable/remain about the same/become less favourable compared with up to now (alternatively, with the previous year's season).

WHOLESALE AND RETAIL TRADE ¹

I. *Developments in July 1955*

- (1) Compared with July 1954 :
 - (a) Our turnover is higher/about the same/lower.
 - (b) We consider that our turnover is at present good/satisfactory (alternatively, usual for the season)/very bad.
 - (c) We placed more/about the same amount of/less orders (long and short term).
 - (d) The flow of goods which we are receiving (including imports) is greater/about the same/smaller.
 - (e) Our stocks are bigger/about the same/smaller.
 - (f) We consider that our stocks are too big/adequate/too small.
- (2) Compared with June 1955 :
 - (a) Our turnover has gone up/remained the same/gone down.
 - (b) Our stocks increased/were unchanged/decreased.
 - (c) Our selling prices were raised/were unchanged/were lowered.

II. *Expectations*

- (1) Compared with July 1955, our turnover in August will rise/remain the same/fall.
- (2) In the next three months we expect :
 - (a) A better/about the same/a worse turnover than in the previous year.
 - (b) To place bigger/about the same/smaller orders with our suppliers than in the previous year.
 - (c) Higher/about the same/lower stocks than in the previous year.
 - (d) Rising/constant/falling selling prices compared with the present.

¹ In the case of trade the questions are to be answered in relation to the business of the firm as a whole, as well as to the individual commodities.

APPENDIX II

Selected "Konjunkturttest" Results, as published in the "IFO-Schnelldienst" (Western Germany)

I. THE GROWTH AND SIZE OF ORDER BOOKS IN THE TEXTILE AND CLOTHING INDUSTRIES IN THE FIRST HALF OF 1955 (ISSUE OF 14 JULY 1955)

	January	February	March	April	May	June
Change with respect to the previous month ^a						
Textiles	—	- 2	- 7	+ 3	+11	+21
Clothing	+30	- 3	+13	+20	+10	+38
Assessment of the size of order books ^a						
Textiles	-29	-24	-20	-19	-16	-12
Clothing	+12	+ 5	+11	+17	+14	+27

^a The figures shown represent the net positive or negative balance between the percentage of firms showing a lengthening and of those showing a shortening of order books; and in the case of the assessment of the size of order books between those showing a relatively big and a too small volume of orders on hand.

II. ORDER BOOKS IN JULY IN INDUSTRIES PRODUCING MACHINERY (ISSUE OF 14 JULY 1955)

(Percentage replies of reporting firms)

	Relatively big in the circumstances	Normal (or usual for the season)	Too small	Net balance
Roller bearings	99	1	—	+99
Construction machinery . . .	59	37	4	+55
Diesel engines	55	40	5	+50
Wood working machinery . . .	53	43	4	+49
Machine-tools	54	37	9	+45
Textile machinery	29	55	16	+13
Agricultural machinery . . .	16	60	24	- 8
Sewing machines	—	85	15	-15

III. EXPECTATIONS CONCERNING THE BUSINESS SITUATION IN THE NEXT SIX MONTHS IN THE CONSUMER-GOODS INDUSTRIES (ISSUE OF 12 AUGUST 1955)

(Percentage replies of reporting firms)

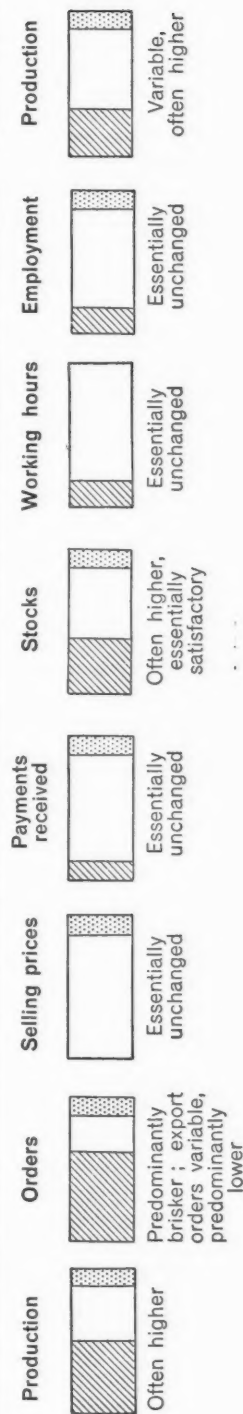
1955	Consumer-goods industries			Of which, textile industries		
	More	Less	Net balance	More	Less	Net balance
	favourable	favourable		favourable	favourable	
	than up to now			than up to now		
January . .	23	13	+10	15	18	— 3
February . .	26	10	+16	19	13	+ 6
March . . .	29	13	+16	24	20	+ 4
April . . .	22	11	+11	14	16	— 2
May	26	6	+20	18	7	+11
June	34	3	+31	26	2	+24
July	40	2	+38	38	3	+35

APPENDIX III

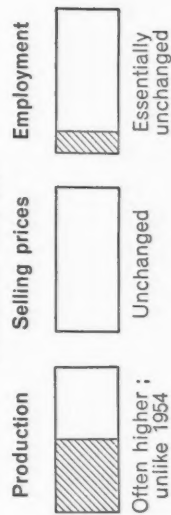
The "Konjunkturspiegel" for the Austrian Food and Drink Industry in May 1955


Compared with
May 1954


Development in May 1955 compared with the preceding month




Outlook for June 1955



 = Share of firms reporting an increase

 = Share of firms reporting no change

 = Share of firms reporting a decrease

APPENDIX IV

Summary of the French I.N.S.E.E. Questionnaire for the Enquiry into Prospects for the Second Half of 1955

(ISSUED IN MAY 1955)

INDUSTRY

1, 2, 3. Description

The first three questions seek general information as to the nature of the firm's production, the range in which its turnover and its numbers employed fall, and the approximate shares of its production for the home, French Union, and foreign markets.

4. Trend

The general trend of the firm's business in the past three months (allowance being made for seasonal variations) was towards expansion/no change or uncertain/contraction.

5. Present Position and Prospects

For ten subjects, and for each of the major groups of products which you declare your firm produces, compare the present position with the corresponding period of the preceding year and the position which you expect in the second half of 1955 compared with the second half of 1954. Choose between five answers (with a further possibility, in the case of the prospects for the second half of 1955, of putting a question mark, should no alternative seem more probable than another) :—big increase, moderate increase, no change, moderate decrease, big decrease.

The ten subjects are :

Production ; order books ; exports to the French Union ; exports to foreign countries ; numbers employed ; hours worked per week ; stocks of raw materials ; stocks of finished goods ; prices of input materials ; selling prices of the products.

6. Factors limiting Activity

(a) Indicate for each of the factors mentioned below :

- (i) whether its inadequacy at present limits your firm's activity (put a cross in column 1) ;
- (ii) whether you consider that during the second half of 1955 you will feel the inadequacy more than (+)/as much as (=)/or less than (—) at present (indicate in column 2).

	1 At present	2 Second half of 1955	Remarks
Equipment			
Unskilled labour			
Skilled labour			
Raw materials			
Home demand			
Foreign demand			
Bank credit			

(b) Do you at present feel the effects of foreign competition :

- in France
 - in the French Union
 - abroad
- } no/a little/seriously.

List the principal competing countries in each of the three areas.

7. Prospects for the French Economy as a Whole

Give your views on the probable course in France of production, employment and hours of work, wholesale prices and exports: in the second half of 1955 compared with the second half of 1954 (production and exports), at the end of 1955 compared with the end of 1954 (employment), and at the end of 1955 compared with the present (prices). One of five possibilities is to be adopted in each case, as indicated by the following percentage limits :

Industrial production	+ 10%	+ 3%	— 3%	— 10%
Industrial employment	+ 5%	+ 2%	— 2%	— 5%
Hours worked per week	+ 5%	+ 2%	— 2%	— 5%
Exports to the French Union	+ 20%	+ 10%	— 10%	— 20%
Exports to foreign countries	+ 20%	+ 10%	— 10%	— 20%
Wholesale prices	+ 7%	+ 2%	— 2%	— 7%

TRADE

1, 2, 3. *Description*

The first three questions correspond to those for industry and in addition seek to find out the kind of trade (*e.g.*, wholesale or retail, import or export).

4. *Trend*

As for industry.

5. *Present Position and Prospects*

Comparisons are requested, as for industry, for volume of sales, volume of purchases, volume of stocks, purchase prices, selling prices.

6. *Stocks*

Indicate for each major group the number of months' sales represented by your present level of stocks.

7. *Prospects for the French Economy as a Whole*

Comparisons are requested, as for industry, covering exports and the total turnover in trade (second half of 1955 compared with second half of 1954) and wholesale prices (end of 1955 compared with the present). The percentage limits to the five ranges are :

Total trade turnover ^a	_____ + 10% _____	+ 3% _____	— 3% _____	— 10% _____
Volume of exports	_____ + 20% _____	+ 10% _____	— 10% _____	— 20% _____
Wholesale prices	_____ + 7% _____	+ 2% _____	— 2% _____	— 7% _____

^a In terms of volume.

APPENDIX V

Selected Results of the French I.N.S.E.E. Enquiry for the Second Half of 1955

(ISSUED IN MAY 1955)

(The figures represent the distribution of answers in percentages)

- ++ : strong increase
- + : moderate increase
- = : no change
- : moderate decrease
- : strong decrease
- ? : proportion of firms not answering the question

1. VOLUME OF ORDERS ON HAND: PRESENT POSITION AND PROSPECTS FOR THE END OF 1955—
COMPARISONS WITH THE CORRESPONDING PERIODS OF 1954

	Present Position					Prospects				
	++	+	=	-	--	++	+	=	-	--
Mining and quarrying ^a	45	34	21	0	0	0	36	64	0	2
Petroleum	56	44	0	0	0	15	9	76	0	0
Metal production	61	25	13	1	0	6	48	45	1	0
Metal using	18	52	21	8	1	11	51	30	7	1
Chemicals	9	63	23	5	0	2	68	25	5	0
Building materials	14	49	30	6	1	1	52	45	2	0
Textiles	3	21	20	32	24	1	11	33	43	12
Clothing	6	30	35	23	6	4	35	35	22	4
Food	1	32	46	18	3	1	26	60	9	4
Leather	3	36	25	28	8	3	37	53	4	3
Wood	18	40	23	19	0	1	50	28	21	0
Paper	14	50	19	17	0	1	48	33	18	0
Printing	28	22	41	9	0	23	29	35	13	0
Miscellaneous	1	53	30	14	2	6	39	41	13	1
Total	21	44	22	10	3	6	45	37	10	2
TOTAL for forecasts made in November 1954 . . .	5	46	38	9	2					

^a Excluding coal mining.

2. TEXTILE INDUSTRIES: COMPARISON WITH CORRESPONDING PERIOD OF PRECEDING YEARS

Number of usable answers : 189

25 firms with less than 100 employees
 46 " " 100 to 200 employees
 96 " " 200 to 1,000 employees
 22 " " over 1,000 employees

Total turnover : about 240 billion Fr. fr.

	Present Position						Prospects for second half of 1955					
	++	+	=	-	--	?	++	+	=	-	--	?
Production	2	27	25	31	15	0	1	13	28	46	12	2
Orders on hand	3	21	20	32	24	4	1	11	33	43	12	7
Exports { French Union	0	4	47	32	17	27	0	8	33	42	17	28
Other	3	30	36	15	16	25	2	26	35	19	18	37
Labour force	1	7	34	56	2	2	0	3	42	52	3	4
Hours worked per week	0	6	55	29	10	1	0	4	47	43	6	4
Stocks of raw materials	1	12	63	22	2	4	1	6	60	32	1	12
Stocks of finished goods	8	40	42	9	1	5	3	30	49	17	1	11
Input prices	0	14	42	43	1	4	0	6	50	43	1	12
Selling prices	0	0	30	50	20	3	0	1	37	45	17	7

Present trend : expansion 18 per cent ; no change 37 per cent ; contraction 45 per cent.

Frequency of replies mentioning factors limiting activity :

Percentages

Home demand	76	Bank credit	15
Foreign competition abroad	67	Equipment	14
Foreign demand	58	Skilled labour	7
Foreign competition in the French Union	57	Raw materials	2
Foreign competition at home	54	Unskilled labour	2

Results by commodity groups ^a

	Present Position				Prospects			
	Production	Order books	Employment	Stocks	Production	Order books	Employment	Stocks
Wool	=	=	=	=	-	-	-	-
Cotton	--	--	--	+	--	--	-	-
Flax	(=)	(--)	(-)	(+)	(-)	(+)	(=)	(+)
Jute	(++)	(=)	(-)	(+)	(--)	(--)	(=)	(--)
Silk	(+)	(+)	(=)	(=)	(+)	(+)	(=)	(=)
Artificial textiles	(++)	(++)	(--)	(++)	(=)	(=)	(--)	(++)
Dyes	--	--	--	=	--	--	--	-

^a In these summary results ++ indicates that at least two-thirds (weighted) of those replying report an increase, + that the proportion is somewhat less, and = that the proportions are fairly evenly distributed. The signs are placed in brackets when the total number of answers received is less than 15.

APPENDIX VI

Articles and Publications on the "Konjunkturtest" Method relating to the Reliability of the Results, to Business Expectations, and to the Problem of Quantification ¹

1. O. Anderson, Jr., R. K. Bauer, and E. Fels : *Zur Treffsicherheit kurzfristiger Unternehmererwartungen*, IFO-Institut für Wirtschaftsforschung, Munich, 1954.
2. O. Anderson, Jr., R. K. Bauer, and E. Fels : "On the accuracy of short-term entrepreneurial expectations", paper read at the 114th annual meeting of the American Statistical Association, 10-13 September, 1954, Montreal. (*Proceedings of the Business and Economic Statistics Section, American Statistical Association*, Washington D.C., 1955.)
3. O. Anderson, Jr., R. K. Bauer, H. Führer, J. P. Petersen and M. Wolfsteiner : "Short-term entrepreneurial reaction patterns", paper read at the 17th European meeting of the Econometric Society, Kiel, September 1955.
4. O. Anderson, Jr., R. K. Bauer and R. Giehl : "Zur Theorie des Konjunkturtests. Modelltheoretische Betrachtungen", *IFO-Studien*, Heft 2, 1955.
5. H. Theil and J. S. Cramer : "On the utilization of a new source of economic information : an economic analysis of the Munich Business Test", paper read at the 16th European meeting of the Econometric Society, Uppsala, Sweden, August 1954.
6. H. Theil and J. S. Cramer : Contribution to discussion of item 5, *Econometrica*, April 1955, p. 210.
7. H. Theil : "Recent experiences with the Munich Business Test (an expository article)", *Econometrica*, April 1955.
8. H. Theil : "Measuring the accuracy of entrepreneurial expectations", paper read at the 17th European meeting of the Econometric Society, Kiel, September 1955.
9. H. Theil : "On the time shape of economic microvariables and the Munich Business Surveys", *Revue de l'Institut international de Statistique*, No. 2/3, 1952.
10. A. Piatier : "Tendances non chiffrées et comportements: Nouvelles méthodes pour la conjoncture et la prévision économique", *Kyklos* (Berne), Vol. IV, No. 4, and Vol. V, No. 1.
11. H. Langeltütke : "The Munich test method—a new source of economic information", paper read at the 17th European meeting of the Econometric Society, Kiel, September 1955.
12. E. Fels and M. Wolfsteiner : "Ueber ein nichtmetrisches Verfahren mit Konjunkturtestdaten einfache Wirtschaftsmodelle aufzustellen", *IFO-Studien*, Heft 1, 1955.
13. W. Marquardt and J. S. Petersen : "Langfristige ex-post-Erwartungen der Industrie im Konjunkturtest", *IFO-Studien*, Heft 2, 1955.
14. E. Fels : "Mass und Richtung : Zur Aggregation dreiwertiger Signalkonstellationen im IFO-Konjunkturtestverfahren", *Statistische Vierteljahresschrift*, Heft 1/2, 1954 (Vienna).
15. O. Anderson, Jr. : "Konjunkturtest und Statistik", *Allgemeines Statistisches Archiv*, Heft 3, 1951.
16. O. Anderson, Jr. : "Möglichkeiten und Grenzen einer Quantifizierung des Konjunkturtest des Münchner Instituts für Wirtschaftsforschung", *Mitteilungsblatt für mathematische Statistik*, Heft 3, 1951.
17. O. Anderson, Jr. : "Zur Frage der Quantifizierung des Konjunkturtests", *Allgemeines Statistisches Archiv*, Heft 3, 1952.
18. O. Anderson Jr. : "The Business Test of the IFO Institute for Economic Research, Munich, and its theoretical model", *Revue de l'Institut international de Statistique*, May 1952.
19. O. Anderson, Jr. : "Zur Theorie des Konjunkturtestes", *Statistische Vierteljahresschrift*, Heft 1/2, 1953 (Vienna).
20. M. Nicolas : "Nutzen und Grenzen der Korrelationsanalyse", *Vierteljahresshette zur Wirtschaftsforschung*, Heft 2, 1952.
21. J. Pfanzagl : "Zur Methodik des Konjunkturtest-Verfahrens", *Statistische Vierteljahresschrift*, Heft 4, 1952 (Vienna).

¹ No attempt has been made to include articles of a purely descriptive character.

APPENDIX VII

**Table showing for Selected Semi-manufactured and Manufactured Products the Latest Month
of Stock Data published by 15 October 1955**

Product	Country	Belgium	Denmark ^a	France	Western Germany	Italy	Netherlands	Norway	Switzerland	United Kingdom
Crude steel	June	June	..	December ^a	..	July
Scrap	June	..	June	June	..	December ^a } March ^b	..	August
Finished steel	June	..	June	June	..	December ^a	..	June ^a
Copper semi-manufactures	June	..	..	..	..	December ^a	..	..
Textile yarns		June	June	June	..	July } June	..	June	June ^{b c}	..
Textile fabrics		June	June	June	August ^d	July } June	June ^e	..	..	August ^f
Sulphuric acid	August	..	June ^g	..	..	..	July ^h
Wood pulp	June	July	..	..	..	..	..	July
Cement	July	..	..	July	December ^a	..	August
Bricks	July	December ^a	..	August

NOTE. — When the month is printed in italics the items are published in index number form. Data are published monthly unless otherwise indicated. The coverage of each series varies from country to country.

^a Data published at half-yearly intervals.
^b Data published at quarterly intervals.
^c Cotton goods.
^d Retailers' stocks of textiles and clothing.
^e Wool fabrics only.
^f Two separate series for wholesalers' and retailers' stocks of textiles and clothing.
^g Finished chemical products.
^h Sulphur for sulphuric acid.

APPENDIX VIII

Statistics of Orders published monthly or quarterly ¹ in Western European Countries

Belgium : The monthly values of incoming orders for: steel-casting foundries; iron foundries; wire manufactures, wire-drawing and cold-rolled product mills; forging, drop forging, sheet-pressing mills and related industries; manufacture of sheets and plates and other metal manufacturing; metal accessories to the building trade; bridges, finished structures and boiler making; shipbuilding; railway and tramway equipment; motor-car, bicycle, aircraft and related industries; power, pneumatic and hydraulic machines; machine-tool and related industries; textile machinery and related equipment; various machine construction; hoisting, handling and weighing machinery; apparatus and installations for various industries; electrical construction and precision machinery; small arms and ammunition.

France : The monthly stock of orders, measured in physical units, for : cotton yarns; cotton fabrics; straw paper; " kraft " for sacks; other " kraft "; other packing paper; printing and writing paper; thin and special paper; cardboards.

Western Germany : Monthly index numbers of the volume and value of incoming orders for : total industry (excluding mining, building, food, drink and tobacco, and gas and electricity); basic materials industries; investment-goods industries; consumer-goods industries (excluding food, drink and tobacco). Further sub-divisions are given for the following industries : chemicals; potash; stones and earths (of which: cement, lime, tiles, abrasives and non-inflammable goods); machinery; vehicles (of which: motor-driven vehicles, coachwork and trailers, bicycles); steel construction; electro-technical; precision machinery and optical instruments (excluding watches); cold-drawn and rolled products; steel forgings; iron, sheet and metal goods; leather; shoes; ceramics; glass; textiles; clothing; paper products; furniture.

Value index numbers of incoming orders are only published for the following industries: steel-rolling mills; iron and steel casting; non-ferrous semi-manufactures; paper producing.

In all cases the index numbers based upon value also distinguish between home and export orders.

Italy : Monthly index numbers of the volume of incoming orders for the iron and steel industry.

Netherlands : Index numbers of the value of the stock of orders at the end of each quarter for : metal industries (of which : machinery and construction, shipbuilding, other means of transport); electro-technical industries; textile industries (of which : cotton and linen spinning and weaving and rayon weaving, wool spinning and weaving, hosiery and other knitted goods); leather; shoes; clothing; paper mills; cardboard; paper products. In all cases the distinction is also made between home and export orders.

The monthly volume, measured in physical units, of the stock of orders for: paving stones; building bricks; sand-lime bricks and hollow flooring bricks.

Sweden : Information showing diagrammatically for February and August the duration in months, given the current level of employment, of the stock of orders with the combined group of iron and steel, engineering and shipbuilding industries.

United Kingdom : The monthly value of the stock of orders for metal-working machine-tools, the quarterly value and volume, measured in physical units, of the stock of orders for domestic furniture (of which: bedroom, dining-room, upholstery) and the quarterly value of the stock of orders for petroleum equipment, specifying twenty different categories.

¹ For Sweden, the information is collected and published twice a year.

APPENDIX IX

Current Information available on Building Authorizations and Starts showing Frequency of Publication and Units used

M — Monthly
 Q — Quarterly
 S — Twice yearly
 n — Number of authorizations
 b — Number of buildings
 d — Number of dwellings
 r — Number of rooms
 v — Value
 a — Area of floor space
 c — Volume

Country	Authorizations			Starts			Published source
	Residential	Non-residential	Industrial	Re-sidential	Non-residential	Industrial	
Belgium	M n b	M n b		M a b	M a b		<i>Bulletin de Statistique.</i>
Denmark	M d			M d (Q d a)	Q a	Q a	<i>Statistiske Efterretninger ; Byggeindustrien.</i>
Finland	Q d r c	Q c	Q c				<i>Sosiaalinen Aikakauskirja.</i>
France	Q d	Q b	Q n	S d			<i>Cahiers du Ministère de la reconstruction et du logement.</i>
Western Germany . .	M b d v c	M b v c	M v				<i>Wirtschaft und Statistik ; Bundesbaublatt ; Das Baugewerke in der Bundesrepublik Deutschland (Zahlen für die Bauwirtschaft).</i>
Greece	S a d						
Italy	M b d r	M b		M v b	M v b		<i>Bollettino mensile di Statistica.</i>
Netherlands	M d v	M v	M v	M d (Q v)	Q v	Q v	<i>Maandstatistiek van de Nijverheid.</i>
Norway	M a	M a	M a	M a	M a	M a	<i>(Collected by Boligdirektoratet.)</i>
Sweden	M n d v a	M n v	M n v	M d			<i>Arbetsmarknadsstatistik.</i>
Switzerland	M d	S b	Q n				<i>La vie économique.</i>
Turkey	M b d v a	M b v a	M b v a				<i>Bulletin of Statistics.</i>
United Kingdom . .			Q b a	Q d		Q b a	<i>Monthly Digest of Statistics.</i>

NOTE. — The table is confined to figures published more often than annually. The definition of what constitutes an authorization has been left very broad, and series have been included which do not refer to the whole of the country concerned. The category "non-residential" is exclusive of the category "industrial" for the purposes of this table, except in those cases in which nothing is available separately for industrial building.

^a Not regularly published.

^b By public authorities.

APPENDIX X — Sources of some Statistical Data useful for Short-term Economic Forecasting

M — Monthly			Q — Quarterly		S — Twice yearly						
Country	Stocks	Orders	Average dividend yield on ordinary shares	New capital issues	New companies registered	Bank-ruptcies	Bank advances	Employment vacancies registered (i) or vacancies unfilled (ii)	Employment vacancies filled	Man-hours worked in industry	Published source
Austria	.	.	.	M	M	M	M	M (ii)	M	.	Mitteilungen des Direktoriums der Österreichischen Nationalbank
Belgium	M	M	.	M	M	M	M	M (i) M (ii)	M	.	Bulletin de Statistique, Institut national de Statistique
	.	.	S	.	.	.	.	.	.	.	Revue du travail, Ministère du Travail
Denmark	S	.	.	M	.	M	M	.	.	M	Bulletin Hebdomadaire de la Kreditbank, Brussels
Finland	M	.	.	Q	Q	.	M	M (i) M (ii)	M	.	Statistiska Efterretninger, Statistiske Departement
	.	.	.	.	.	.	.	.	.	.	Sukdonesarijat, Ministry of Finance
	.	.	.	.	.	.	M	.	M	.	Tilastotietokauska, Central Statistical Office
	.	.	.	.	.	M	.	.	.	.	Sosiaalinen Aikakauskirja, Ministry of Social Affairs
France	M	.	M	Q	M	M	Q	M (ii)	M	.	Monthly Report of the Bank of Finland
	M	.	.	.	.	.	.	.	.	.	Bulletin mensuel de statistique, Institut national de la statistique et des études économiques
	.	.	.	.	.	.	.	.	.	.	Bulletin mensuel de statistique Industrielle, Ministère de l'industrie et du commerce
Western Germany	M	.	M	.	.	.	.	.	.	.	IFO-Schnelldienst, Ifo-Institut für Wirtschaftsforschung, Munich
	.	M	.	.	.	.	.	.	.	.	Statistische Berichte, Arb. Nr. VII/16, Statistisches Bundesamt
	.	.	.	M	.	.	Q	.	.	.	Die wirtschaftliche Lage in der Bundesrepublik Deutschland, Bundesminister für Wirtschaft
	M	.	.	.	.	M	.	.	.	.	Monatsberichte der Bank deutscher Länder, Frankfurt (Main). (Also exists in English and French versions)
	M	.	.	.	.	M	.	M (ii)	M	M	Wirtschaft und Statistik, Statistisches Bundesamt
	M	.	.	.	.	.	.	.	.	.	Die Eisen- und Stahlindustrie, Statistisches Bundesamt (Quarterly)
Italy	M	.	.	.	.	.	.	.	.	.	L'Industria Lombarda, Milan
	M	M	.	.	.	.	.	.	.	.	Notiziario dell'Associazione Cotoniera Italiana, Milan
	.	M	M	.	.	.	.	.	.	.	Previsioni a breve termine, Florence
	.	.	M	.	.	.	Q	.	.	.	Bollettino, Banca d'Italia, (Two-monthly)
	.	.	M	.	.	.	.	.	.	.	Bancaria, Associazione Bancaria Italiana, Rome
	.	.	.	M	M	M	.	.	.	M	Bollettino mensile di statistica, Istituto Centrale di Statistica
	.	.	.	.	.	.	.	.	.	.	Statistiche del Lavoro, Ministero del Lavoro e della Previdenza sociale
Netherlands	M	Q, M	Q	.	.	.	.	.	.	M ^a	Maandstatistiek van de nijverheid, Centraal Bureau voor de Statistiek
	.	.	.	M	.	.	.	.	.	.	Weekberichten, Rotterdamsche Bank N.V.
	.	.	.	.	.	M	.	M (ii)	.	.	Maandstatistiek van het financieelwezen, CBS
	.	.	.	.	.	M	.	.	.	.	Sociale Maandstatistiek, CBS
	.	.	.	.	.	.	.	.	.	.	Maandschrift, CBS
Norway	Q, M	.	.	M	S	M	M	M (i) M (ii)	M	.	Statistiske Meldinger, Statistisk Sentralbyrå
	.	.	.	.	.	.	.	.	.	.	Arbeidsmarkeder, Arbeidsdirektoratet
Sweden	.	S	M	.	.	.	.	.	.	.	Konjunkturjournalen, Konjunkturinstitutet
	.	.	.	M	.	M	.	M (i)	M	.	Index (Monthly Economic Review), Svenska Handelsbanken, Stockholm
	.	.	.	M	.	M	.	M (i) M (ii)	M	.	Kommersiella Meddelanden, Kommerkollegium
	.	.	.	.	.	.	.	M (i) M (ii)	M	M ^b	Societäts Meddelanden, Kungl. Socialstyrelsen
	.	.	.	.	.	.	.	.	.	.	Report from Industriens Utredningsinstitut
Switzerland	Q	.	.	.	.	.	.	.	.	.	Quartals-Bericht der Paritätischen Kommission der Schweizerischen Baumwollindustrie, Baumwollkommission, St. Gallen
	.	.	.	M	.	.	.	M (ii)	.	.	Bulletin mensuel, Banque Nationale Suisse
	.	.	.	.	.	M	.	.	.	.	La vie économique, Département fédéral de l'économie publique
Turkey	.	.	.	.	.	.	.	M (i)	M	.	İstatistik Bülteni (Bulletin of Statistics), Central Statistical Office
United Kingdom	M	M	M	Q	M	.	Q	M (i)	M	.	Monthly Digest of Statistics, Central Statistical Office
	M	.	.	.	.	.	.	M (ii)	M	.	Board of Trade Journal

NOTE. — As so many of the series mentioned appear in several publications, the sources given are usually those containing the greatest number of this type of data and are not necessarily the earliest sources of publication. Furthermore, the nature of each series varies from country to country, and the sources mentioned are not necessarily the only sources available.

CORRIGENDA

to the

ECONOMIC BULLETIN FOR EUROPE, Vol. 7, No. 2

August 1955

Page 24, Table 14, DELIVERIES OF NEW MACHINERY TO AGRICULTURE IN EASTERN EUROPE, *Czechoslovakia*
—For "Tractor drawn seed drills" read "Harvester binders"; 1st column, for "2 312" read "2 930".

Page 38, Table 3, COMMODITY COMPOSITION OF EXPORTS FROM EASTERN TO WESTERN EUROPEAN COUNTRIES, Fuels and crude materials, Petroleum and products—Delete footnote reference *a*.

Page 76, Table D, TRADE AGREEMENTS BETWEEN EASTERN AND WESTERN EUROPEAN COUNTRIES, Poland-Denmark, 4th column—For "8.9" read "8 to 9".

Page 79, Table D, U.S.S.R.-Iceland, 3rd column—1st line should read "Wheat flour (4,000), maize (5,000)". Delete 4th line.

Page 92, Table 8, SOWN AREAS, YIELDS AND HARVESTS, Field vegetables, last column—For "0.060" read "0.1".

Page 95, Appendix Table I, PLANNED AND ACTUAL OUTPUT BY COMMODITIES IN HUNGARY, *Engineering, Bicycles*, column 1952—For "318" read "218".

Page 100, Appendix Table VII, OPERATIONS OF MACHINE AND TRACTOR STATIONS IN HUNGARY, 2nd line of title—For "Millions" read "Thousands".

Page 103, 9th line should be amended to read as follows:

$$A = \sum \frac{Q_i + Q'_i}{Q_0 + Q'_0} w, \text{ etc., etc.}$$

and the 15th line to read:

$$A' = \sum \frac{Q_i}{Q_0} w', \text{ where } w' = \frac{P_0 Q_0 + P'_0 Q'_0 - p_0 q_0}{\sum (P_0 Q_0 + P'_0 Q'_0 - p_0 q_0)}$$

The Coverage of the Index Numbers, last line—For "1953" read "1954".

Page 106, Table 4, FIXED CAPITAL FORMATION, 1950 to 1954, 4th line—For "and 1953" read "and 1954".

Page 107, Table 7, NUMBERS EMPLOYED IN INDUSTRY, BUILDING AND HANDICRAFTS, 1949 to 1954, 9th line—For "as in 1952" read "as in 1950".

Page 109, Appendix Table I, PLANNED AND ACTUAL OUTPUT BY COMMODITIES, 6th line—For "97.2" read "97.2 per cent"; 10th line, for "148.1" read "148.1 per cent".

Page 110, Appendix Table V, STANDARDS OF HEALTH, EDUCATIONAL AND CULTURAL SERVICES, 4th line—For "in 1954" read "in 1952".

UNITED



NATIONS

WORLD ECONOMIC REPORT, 1953-54

U.N. Publ. Sales No. 1955.II.C.1

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English edition ; French edition in preparation

Each year the United Nations publishes a review of world economic conditions, and this present *Report* is the seventh in this series. World-wide and comprehensive in character, the *World Economic Report* is considered to be the most important annual economic study of its kind made available by the United Nations.

Part I covers domestic economies, which are divided into three broad groups—economically developed private enterprise economies (North America, western Europe, Australia, New Zealand and Japan), centrally planned economies (eastern European countries, mainland China, and Yugoslavia), and economically under-developed countries. Part II covers the changes in international trade and payments, and provides a full study of the following: major developments in world trade; international trade and payments of the United States, western Europe and Japan; international trade and payments of primary producing countries; international trade of eastern Europe and mainland China.

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ECONOMIC DEVELOPMENTS IN THE MIDDLE EAST, 1945-1954

U.N. Publ. Sales No. 1955.II.C.2

\$2.50; 17/6 stg.; Swiss fr. 10.—

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